AUTOMOTIVE

Volume 64 Number 9

PUBLISHED WEEKLY AT CHESTNUT AND 56TH STREETS PHILADELPHIA, FEBRUARY 28, 1931

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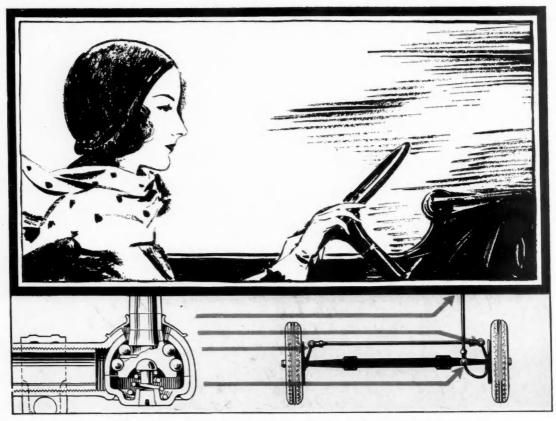
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Vol. 64

Reg. U. S. Pat. Off. Established 1902

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Automotive Industries is published every Saturday by

CHILTON CLASS JOURNAL COMPANY Chestnut and 56th Streets, Philadelphia, Pa.

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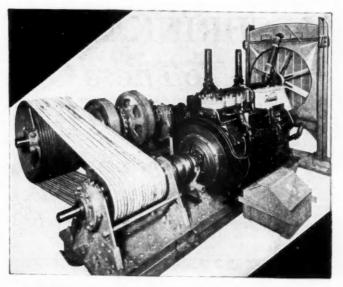
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SUBSCRIPTION RATES: United States, Mexico, United States Possessions, Canada and all countries in Postal Union, \$3.00 per year; Foreign, \$6.00 per year. Single Copies 35c.

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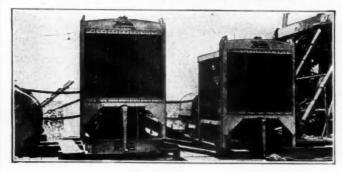
Automotive Industries—The Automobile is a consolidation of the Automobile (monthly) and the Motor Review (weekly), May, 1902; Dealer and Repairman (monthly), October, 1903; the Automobile Magazine (monthly), July, 1907, and the Horseless Age (weekly), founded in 1895, May, 1918.



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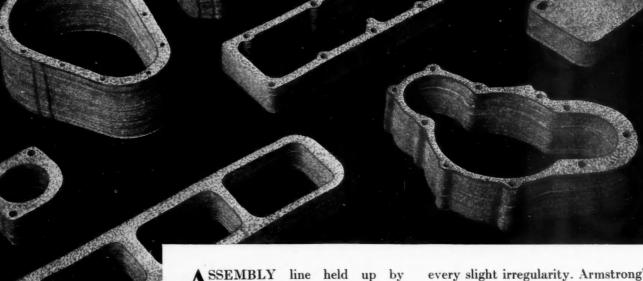
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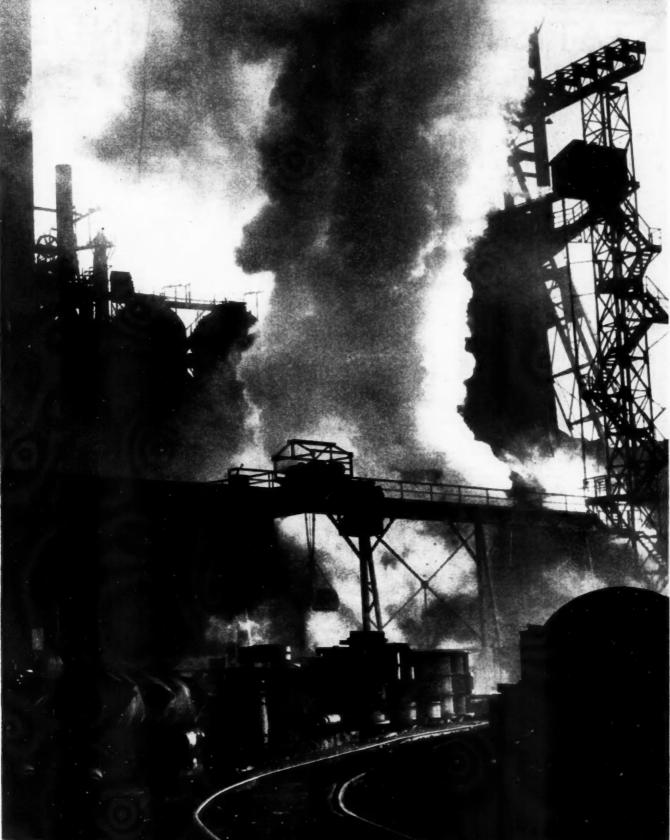
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VOLUME 64

FEBRUARY 28, 1931

NUMBER 9

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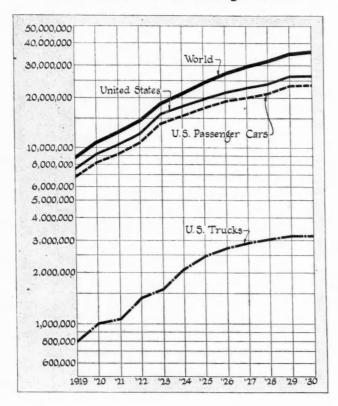
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World Motor Vehicle Registrations



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1926														*	4,608,331
1927			4												5,461,010
1928						,									6,384,653
1929					,			*	×			,			7,435,372
1930			,										4		9,065,439

Summary of World Registrations of Motor Vehicles

	Total Cars, Trucks & Buses	*Cars	*Trucks	*Buses	Motorcycles
Americas (except U.S.)	2,065,134	1,680,564	366,235	18,335	21,613
Africa		279,582†	66,887†	2,633†	65,801;
Asia	551,467	394,976	143,741	12,750†	82,229†
Europe	5,268,522	3,774,161†	1,343,760†	150,601†	2,430,378†
Oceania	831,214	661,934†	165,861†	3,419†	133,126
United States:	26,746,184	23,251,050	3,413,725	81,409	111,784
Total	35,811,623	30,042,267	5,500,209	269,147	2,844,931

^{*} Where segregated.

[†] Not complete for all sections.

[‡] Automotive Industries—all others El Automovil Americano and The American Automobile (Overseas Edition).

OF MOTOR VEHICLES

U. S. Motor Vehicle Registrations by States

(As of Jan. 1, 1931 and 1930)

			1,	to or ball.	1, 173	and i	730]	_				
								P	er Cent	Perso	ns	
			_		_				1930	per		
State	1930	ger Cars 1929	1930	1929	1930	1929	Total Moto	1929	Over 1929	Moto		cycles 1929
Ala.	238,105	246,640	37,957	38,500	1,065	1,251	277,127	286,391	-3.1	9.5	663	704
Ariz.	98,147	110,743	13,278	12,583	198	-,	111,623	123,326	-9.5	3.9	390	396
Ark	193,000	193,400	38,000	39,732	300	310	231,300	233,442	-0.9	8.0	400	417
Calif.	1,974,429	1,899,314	§99,387	§89,033	-		2,073,816	1,988,347	+4.3	2.7	10,316	9,696
Colo	276,847	273,950	31,662	28,501	†	1,028	308,509	303,479	+1.7	3.3	1,059	1,142
Conn.	297,781	281,800	49,074	50,200	635	880	347,490	332,880	+4.4	4.6	2,858	2,900
Del.	45,533	44,728	10,523	9,775	000	000	56,056	54,503	+2.8	4.2	295	308
D. C	154,238	157,639	18,796	17,302	400	400	173,434	175,341	-1.1	2.8	918	1,009
Fla	277,210	284,383	52,596	56,094	200	1,881	329,806	342,358	-3.7	4.4	1,262	1,309
Ga	294,461	310,362	46,716	48,166	+	-,	341,177	358,528	-4.8	8.5	1.110	1,141
Idaho	104,600	104,639	15,712	13,772	134		120,446	118,411	+1.7	3.7	370	370
Ill	1,429,146	1,410,913	209,114	204,175	‡		1,638,260	1,615,088	+1.4	4.6	6,245	6,055
Ind.	746,354	755,161	128,087	127,641	1.012	1,062	875,453	883,864	-1.0	3.7	2,862	2,983
Iowa	709,985	715,466	72,190	68,402	‡	_,,	782,175	783,868	-0.2	3.1	1,789	1,665
Kan.	511,384	507,529	83,139	73,694	‡		594,523	581,223	+2.3	3.1	1,275	1.178
Ky	294,178	296,041	35,841	34,201	645		330,664	330,242	none	7.9	681	746
La	235,000	234,565	47,000	46,303	0.20		282,000	280,868	+0.4	7.4	600	600
Me	147,791	148,870	33,451	31,535	106	111	181,348	180,516	+1.2	4.3	1,380	1,362
Md	283,120	276,140	37,460	38,839	600	600	321,180	315,579	+1.8	5.1	1,941	1,986
Mass.	745,064	729,284	103,608	98,133	3.450	1.730	852,122	829,147	+2.8	4.9	4.677	5,370
Mich.	1,161,051	1,220,848	167,158	176,824	0,200	_,	1,328,209	1,397,672	-5.0	3.6	3,530	3,988
Minn,	618,661	620,342	108,063	99,696	298	361	727,022	720,399	+0.9	3.5	1,870	1,900
Miss.	225,000	224,000	32,000	31,000			257,000	255,000	+1.1	7.8	100	100
Mo	671,920	669,320	91,455	84,756	‡		763,375	754,076	+1.2	4.7	1,751	1,875
Mont.	111,089	115,260	25,657	25,092	150		136,896	140,352	-2.5	3.9	261	233
Neb.	367,410	373,086	58,642	41,286	177	227	426,229	414,599	+2.8	3.2	900	950
Nev.	23,388	25,219	6,257	6,604			29,645	31,823	-6.8	3.1	74	96
N. H.	93,155	89,975	18,398	19,025	†		111,553	109,000	+2.3	4.1	1,132	1,270
N. J	711,527	688,334	133,499	133,774	5,389	5,342	850,415	827,450	+2.8		5,998	6,543
N. M.	74,900	75,000	15,000	2,750	800		90,700	77,750	+16.	7 4.6	300	180
N. Y	1,920,255	1,878,300	347,054	345,500	°49,515	54,400	2,316,824	2,278,200	+1.7	5.4	13,557	14,914
N. C	412,042	447,055	62,049	56,535	210		474,301	503,590	-5.8	6.7	1,200	1,262
N. D	155,383	162,092	27,636	25,954			183,019	188,046	-2.7		235	230
Ohio	1,585,423	1,538,000	213,243	200,000			1,798,666	1,738,000	+3.5		7,381	7,527
Okla,	490,947	514,729	59,384	60,390	†	256	550,331	575,375	-4.3		1,226	1,337
Ore.¶	233,787	247,577	23,387	24,656	973	1,037	258,147	273,270	-5.5		1,397	1,796
Pa	1,528,721	1,524,799	236,171	241,442	8,326		1,773,218	1,774,923	-0.1		13,223	13,670
R. I	115,176		20,132	20,489	559	1,861	135,867	134,846	+0.8		882	1,024
S. C	195,210		26,261	25,591	195		221,666	231,274	-4.2		559	451
S. D	180,000		24,306	22,780	‡		204,306	204,199	none		250	207
Tenn.	332,417		37,871	32,300	°2,255		372,543	358,400	+3.9		1,242	1,150
Tex.	1,152,904		205,041	182,438	1,598		1,359,543	1,347,588	+0.9		3,948	4,016
Utah	93,628		17,369	17,500	‡		110,997	114,700			488	535
Vt	78,260		8,226	8,559	138		86,624	93,030			524	487
Va	319,061		62,537	61,093	335		381,933	390,658	-2.2		1,929	1,994
Wash.	388,719		63,188	62,421	604		452,511	448,280			2,172	2,593
W. Va			40,232	38,618				268,333				1,517
Wis			109,996	105,253		557	788,502	794,943			2,990 121	2,851 92
Wyo	51,579	51,880	9,922	8,800			61,501	60,680	+1.4	0.0	121	02
	-											

Totals 23,251,050 23,245,495 3,413,725 3,287,707 81,409 90,655 26,746,184 26,623,857 +0.46 4.5 111,784 116,125

Based on Government Census taken April, 1930. Buses included with passenger cars. Buses included with trucks. Includes only trucks weighing over 3000 lb.

[¶]Change in fiscal year from Jan. 1 to July 1. ¶Change taxi. ∥Figures for fiscal year ending Oct. 31, 1930.





U. S. Motor Vehicle Registrations, 1919 to 1930

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Ala	58,898	74,637	82,343	90,052	126,642	157,262	194,580	225,651	243,539	255,850	286,391	277,127
Ariz	28,979	34,559	35,049	38,034	48,741	57,828	68,029	73,574	74,527	91,800	123,326	111,623
Ark	49,450	59,082	67,446	86,425	111,946	141,983	183,764	209,419	206,568 1,699,955	214,960 1,727,024	233,442 1,988,347	231,300 2,073,816
Calif	477,450	568,892	673,830 $145,739$	861,805 162,328	1,100,283 189,356	1,321,480 213,247	1,439,463 240,097	1,600,475 $252,787$	268,026	245,260	303,479	308,509
Colo	104,865	127.549 119.134	137,526	154,675	177,931	214,318	248,474	260,911	282,892	315,234	332,880	347,490
Conn Del	109,651 16,152	18,300	21,413	24,560	29,977	35,136	40,681	44,418	46,707	51,210	54,503	56,056
D. C	35,400	39.712	61,745	85,425	103,171	80,720	93,612	129,792	126,136	150,915	175,341	173,434
Fla	55,400	73,914	97,837	115,891	160,000	194,196	260,720	416,930	391,168	358,063	342,358	329,806
Ga	127,326	144,422	131,942	145,584	173,794	209,300	244.871	274,037	296,567	318,180	358,528	341,177
Idaho	42,220	50,873	51,264	53,874	62,379	69,225	81,484	95,861	103,000	108,931	118,411	120,446
III	478,438	568,759	670,434	786,190	969,331	1,123,724	1,263,177	1,370,503	1,438,985	1,504,359 843,092	1,615,088 883,864	1,638,260 875,453
Ind	277,255	332,707	400,342	469,939	353,342 576,398	650,219	725,410 657,567	772,215 689,036	813,496 706,829	736,666	783,868	782.175
Iowa	363,857	437,300 265,396	460,528 291,309	500,148 327,194	375,594	620,906 410,891	457.033	491,276	501,901	536,262	581,223	594,523
Kan	227,752 90,641	112,685	126,371	154,021	198,347	231,784	260,754	278.337	285,099	305,291	330,242	330,664
La.	51.000	66,000	80,500	102,284	138,500	178,000	207,000	239,500	255,000	277,000	280,868	282,000
Me	53,425	62,907	77,527	92,539	108,609	127,178	140,134	150,916	164,250	166,621	180,516	181,348
Md	95,634	116,341	140,572	165,624	209,938	195,581	230,684	249,056	284,267	234,849	315,579	321,180
Mass	247,183	304,631	360,732	385,231	566,150	572,315	654,338	689,593	696,107	757,720	829,147	852,122
Mich	325,813	412,717	477,037	578,980	730,658	868,587	990,709	1,118,785	1,156,344	1,248,080	1,397,672	1,328,209
Minn	259,743	309,569	328,700	380,557	448,187	502,987	569,694	624,478	640,102	668,155	720,399	727,022
Miss	45,030	63,484	65,139	77,001	104,400	134,547	177,262	210,500	227,103	235,826	255,000	257.000
Mo	244,363	296,919	346,437	392,969	476,373	544,635	602,900	651,350	678,564	714,437	754,076	763,375 136,896
Mont	59,325	60,646	58,785 238,704	62,649 256,654	73,828 286,053	79,695 308,713	94,656 338,718	103,946 $367,838$	112,756 $373,912$	127,442 375,972	140,352 414,599	426,229
Neb	192,000	223,000 10,464	10,819	12,647	15,700	18,387	21,185	24.014	25,851	27,134	31,823	29,645
Nev	9,305 $31,625$	34,680	42,039	48,293	59,571	71,929	81,250	89,001	96,000	102,750	109,000	111,553
N. J	190,873	227,737	272,994	341,626	430,958	504,190	579,886	650,891	712,402	754.841	827,450	850,415
N. M	18,077	22,109	24,703	25,473	31,737	41,750	49,101	54,341	60,000	67,643	77,750	90,700
N. Y	571,662	669,290	812,031	1,002,293	1,214,642	1,412,879	1,613,141	1,815,437	1,900,866	2,093,792	2,278,200	2,316,824
N. Y N. C	109,017	140,860	148,684	182,550	247,612	305,756	351,767	385,763	422,544	486,000	503,590	474,301
N. D	82,885	90,840	92,644	99,052	109,244	117,061	144,956	157,822	160,696	173,944	188,046	183,019
Ohio	511,031	615,397	720,632	859,504	1,068,700	1,244,000	1,305,000	1,510,000	1,570,418	1,662,000	1,738,000	1,798,666
Okla	144,500	204,300	221,300	249,659 134,299	307,000	342,982 192,629	438,000 216,324	510,000 234,134	644,450 246,623	585,346	575,375 273,270	550,331 258,147
Oregon .	83,332	103,790	118,325 689,589	829,737	166,412 1,064,624	1,228,586	1.317.053	1,463,261	1.568,617	254,415 1,642,866	1.774,923	1,773,218
Pa	482,117 44,833	570,164 50,375	54,957	66,466	85,480	90.652	102,476	109,145	119,335	126,918	134,846	135,867
R. I S. C	70,143	93,843	90,546	95,978	128,656	163,382	170,658	180,967	199,794	216,964	231,274	221,666
S. D	104,628	120,395	119,274	125,238	131,720	142,280	168,118	168,230	170,592	191,900	204,199	204,306
Tenn	80,422	101,852	117,025	135,716	173,365	204,680	248,021	279,639	295,530	325,406	358,400	372,543
Texas	331,310	427,693	467,616	526,238	688,899	834,040	968,406	1,047,202	1,110,986	1,213,224	1,347,588	1,359,543
Utah	35,236	42,578	47,523	49,156	66,025	69,227	72,490	81,633	78,976	98,541	114,700	110,997
Vt	26,807	31,625	36,965	43,881	52,776	61,179	69,576	73.871	79,510	86,231	93,030	86,624
Va	94,120	134,000	141,000	169,000	219,092	261,643	281,100	320,367	335,275	358,633	390,658	381,933
Wash	148,775	173,920	185,359	220,957 112,763	261,224 162,191	294,812 190,134	332,442 217,069		389,409 241.042	408,156 251,419	448,280 268,333	452,511 266.132
W. Va	50,203	78,862 293,298	93,894 341.841	388.044	457,271	525,221	596,373		698,944	743,815	794,943	788,502
Wis	236,981 21,371	23,926	26,619	30,637	39,831	43,639	47,712		52,222	56,867	60,680	61,501
Wyo	41,311	20,320	20,013	00,001	50,001	20,000	21,122	10,000	52,222	00,001	00,000	01,001

Totals. 7,596,503 9,206,141 10,505,630 12,299,770 15,312,658 17,605,495 19,857,915 22,046,957 23,253,882 24,501,004 26,623,857 26,746,184

Revenue from License Fees and Gasoline Tax

	Gas Tax Cents Per Gallon	Gasoline Tax	License Fees (a)		Gas Tax Cents Per Gallon	Gasoline Tax	License Fees (a)
Alabama	4	\$7,063,441	\$3,775,500	New Jersey	2(c)	\$11,003,728	\$15,368,194
Arizona	4	3,011,844	585,240	New Mexico	5	2,500,000	1,380,000
Arkansas	5	6,000,000	4,000,000	New York	2	38,000,000	37,502,089
California	3	39,666,029	9,668,562	North Carolina	5	12,533,454	6,835,743
Colorado	4	6,642,208	1,901,220	North Dakota	3	3,379,744	1,958,662
Connecticut		4,432,419	6,477,089	Ohio	4	33,500,000	11,674,460
Delaware		1.091.748	1,067,699	Oklahoma	4	8,752,058	6,536,361
District of Columbia		1,477,953	181,584	Oregon	4	6,819,958	6,501,399
Florida		13,583,097	4.813.293	Pennsylvania	3	33,511,515	32,960,993
Georgia		13,406,799	4,477,539	Rhode Island	2	1,776,912	2,277,544
Idaho		3.050,507	1,995,343	South Carolina	6	4,887,744	2,734,870
Illinois		27,640,605	18,447,247	South Dakota	4	5.149,295	2,957,592
Indiana		18,155,631	6,304,956	Tennessee	5	10,806,489	4,745,909
Iowa		11,724,784	12,693,621	Texas		29,767,312	13,250,669
Kansas		10,828,965	5,834,580	Utah		2,100,000	855.662
Kentucky		7,780,000	5,393,178	Vermont	4	1,864,701	2,392,152
Louisiana		6,850,000	4,600,000	Virginia	5	11,350,573	6,245,963
Maine		4,345,705	3,125,228	Washington		6,685,056	7,529,576
Maryland		7,268,238	3,459,366	West Virginia		5,440,689	4,665,270
Massachusetts		10,496,437	6,552,362	Wisconsin		8,702,116	13,061,324
Michigan		23,750,000	21.335,617	Wyoming		1,214,500	691,509
Minnesota		11,432,959	11.074.654		room .	2/22 1/000	001,000
Mississippi		7.300,000	4.249.650	Total		\$510,844,904	\$342,256,282
Missouri		8,750,000	10,125,000			401010111001	4012,200,202
Montana		2,900,000	1,601,926				
Nebraska		9.161.561	3,805,049	(a) Includes registration fee	8.		
Nevada		750,000	294,403	(b) 5-cent tax became effect		27, 1930.	
New Hampshire		2,538,130	2,290,435	(c) 3-cent tax became effect			
New Hampshire	. 1	8,000,100	2,200,400	(c) o-cent tax became enec	LIVE LICE,	1, 1000.	

OF MOTOR VEHICLES



A 1 .1		C 11	
North	and	South	America

INOLL	n and	South 1	Americ	a	
	Motor				Motor-
Country	Vehicles	Cars	Trucks	Buses	cycles
Alaska	2,600	1,800	800		-****
Argentina	387,864	306,331	78,383	3,150	3,086
Bahamas	1,015	777	232	6	9
Barbados	1,671	1,350	183	138	116
Bermuda	56		2,000		
Bolivia	3.700	1,000	2,000	700	****
Brazil	159,986	107,095	52,891		1,568
British Guiana	1,900	****	****	****	400
British Honduras	207	165	42		****
Canada	1,215,071	1,053,632	159,814	1,625	9,369
Chile	40,500	26,500	12,000	2,000	500
Colombia	13,750	8,750	3,750	1,250	280
Costa Rica	1,636	1,166	381	89	97
Cuba	46,204	29,441	14,874	1,889	495
Dominica	36	32	4	****	10
Dominican Repub.	4,260	3,165	1,031	64	65
Dutch Guiana	200	****	****	****	90
Dutch West Indies	2,100	****	1111	****	
Ecuador	. 2,167	1,243	812	112	49
French Guiana	100	65	35	49	10
Grenada	397	308	. 40		60
Guadeloupe	1,405	1,150	130	125	140
Guatemala	2,379	****			226
Haiti	2,851	2,244	330	277	29
Honduras	1,131	755	376		25
Jamaica	7,571	5,833	1,738		572
Martinique	2,290	1,750		80	120
Mexico	80,800	59,500	16,500	4,800	675
Newfoundland	3,027	2,506	510	11	97
Nicaragua	1,004	850	150	4	105
Other West Indies	700	****	****	****	25
Panama	8,750	****	****	****	400
Paraguay	2,160	****			22
Peru	14,155	8,400		400	300
Porto Rico	13,744	10,501	2,858	385	64
Salvador	2,248	1,829		110	85
St. Lucia	175	135	40		20
St. Lucia St. Pierre and					
Miquelon	122	49	73		5
Trinidad and					
Tobago	6,250				900
United States	26,746,184	23,251,050		81,409	111,784
Uruguay		37,017	7,509	1,071	839
Venezuela	15,000	****		****	750
Virgin Islands	600	475	125	****	10
Total 1930	28,843,473	*24,931,614	*3,778,960	*99,744	*133,397
Total 1930, less					
United States	2,097,289	*1,680,564	*365,235		*21,613
Total 1929	28,664,929	*24,907,926	*3,649,771	*104,832	*136,692
Total 1929, less					
United States	2,041,072		*362,064		*20,567
Increase	178,544	*23,688	*129,189	-*5,848	-*3,295
Increase, less					
United States					
Increase	0.6%		3.5%	-5.6%	-2.4%
Increase, less					
United States	2.7%	9.1%	8.7%	29.3%	5.6%

^{*} Not complete for all territories.

AFRICA

COUNTRY	Motor Vehicles	Cars	Trucks	Buses	Meter- cycles
Algeria	47,050	39,250	6,600	1,200	2,750
Angola	2.500		*****	*****	1,500
Belgian Congo	5,943	2,996	2,947		2,253
British East Africa.	18,949	11,227	7.722	*****	5,037
British West Africa	14,505	8,092	6,413		3,124
Egypt	32,627	20,792	4.617	1.218	3.740
Ethiopia	690	590	100	111111	50
French West Africa	8,801	3,209	5,592		425
Liberia	300				200
Madagascar	2,900	2,100	800		1,500
	865	700	165		10
Madeira.	3,300		650		250
Mauritius		2,650			
Merecce.	17,300	12,500	4,800		1,200
Nyasaland Protectorate	1,150	650	500		1,250
Portuguese East Africa	2,390	1,300	1,090		810
Rhodesia	10,550	9,000	1,550		2,200
Seychelles Islands	15	*****	*****		111525
Somalilands and Eritrea	1,000	400	600		150
Southwest Africa	3,750	2,750	1,000		
Spanish Morocco	2,331	1,555	776		138
St. Helena.	14				
Sudan.	2,176	1.018	1.158		
Tangier	598	358	175	65	2
Tripolitania	938	351	587		150
Tunisia.	11,600	10,000	1.450	150	*1,500
Union of South Africa	159,689	142,094	17,595	1-14	37,759
Total 1930	351,931	*279,582	*66,887	*2,633	*65,801
Total 1929	323,496	*259,031	*60,390	*2,261	*60,502
Increase	28,435	*20,551	*6,497	*372	*5,299
Increase, per cent	8.8	7.9	10.7	16.4	

ASIA

Motor Vehicles	Cars	Trucks	Buses	Meter- cycles
742	504	238		*****
38,409	31,595	6,814		4,345
100	70	30		
20,670	15.027	2,976		3.515
35,500	23,000			2,500
1.304	848			-,000
	16,616			2,321
				478
				27,500
				2.1000
				25,000
				13.900
				300
				350
				850
				650
				200
				320
0,000	0,000	4,000	900	820
551 467	204 076	4149 741	*10 750	*82,229
044,419	010,200	1101,990	11,220	*80,861
20 049	15 799	411 705	1 505	1 200
	4 1	8 0		1,368
	742 38,409 100 20,670	Vehicles Cars 38,409 31,595 100 70 20,670 15,027 35,500 23,000 1,304 848 20,447 16,616 2,450 1,780 171,000 129,500 2,544 1,871 98,500 60,500 88,178 67,238 2,543 4,600 33,800 23,200 7,550 4,300 9,600 7,600 9,500 5,000 551,467 394,976 522,419 379,238 29,048 15,738	Vehicles Cors Trucks 38,499 31,595 6,814 100 70 30 20,670 15,027 2,976 35,590 23,000 12,500 1,304 848 12,500 1,71,000 129,500 41,500 2,450 1,783 433 171,000 129,500 41,500 2,544 1,871 574 98,500 60,500 38,000 23,523 1,823 14,402 2,523 1,829 10,600 7,550 4,300 3,750 33,800 23,200 10,600 7,550 4,300 3,250 9,500 7,600 2,000 9,500 5,000 4,000 551,467 394,976 †143,741 522,419 379,238 †131,956 29,048 15,738 †11,785	Vehicles Cars Trucks Buses 742 38,499 31,595 6,814 288 100 70 30 20,670 15,027 2,976 2,667 35,590 23,000 12,500 461 2,372 461 2,372 20,447 16,616 1,459 2,372 483 174 171,000 129,500 41,500 2,544 1,871 574 99 98,500 60,500 38,000 88,178 67,238 14,402 6,538 2,523 1,829 10,600 7,550 4,300 3,750 400 33,800 23,200 10,600 7,550 4,300 3,250 9,500 7,600 2,000 9,500 551,467 394,976 †143,741 *12,750 552,419 379,238 †131,956 *11,225 29,048 15,738 †11,785 1,525 </td

^{*}Not complete for all territories. †Includes buses in several territories.

EUROPE

COUNTRY	Motor Vehicles	Cars	Trucks	Buses	Meter- cycles
Albania.	450		*****	*****	
Austria.	40,400	22,800	17,600		50,300
Azores	647	556	39	52	60
Belgium	158,000	103,000	53,500	1,500	51,314
Bulgaria	3,715	2,589	1,126		507
Cze:hoslovakia.	74,000	50,000	21.000	3.000	38,000
Danzig Free State	1.952	1,200	700	52	1,050
Denmark	110,324	78,541	30,620	1,163	23.349
Esthonia.	2,910	1,650	1,100	160	480
Faree Islands	67	18	32	17	42121
Finland	36.050	23.800	10,900	1.350	5,450
France	1,500,387	1,099,380	401.007		500,000
Germany	658,686	488,838	157,432	12,416	731,237
Gibraltar	651	507	101	43	47
Great Britain.	1.558,032	1,110,930	(a)346,237	†100,865	702,878
Greece	18,500	*****		,	1.300
Holland	120,700	73,500	43,600	3,600	32,300
Hungary	20,019	13,970	5.342	707	11,400
Iceland.	1,226	475	751	*****	100
Irish Free State	47,198	38,876	7,558	764	7,039
Italy	269,500	200,000	61,000	8,500	87,500
Latvia.	3,915	2,115	1,460	340	1,700
Lithuania	2,344	1,444	519	381	733
Luxembourg	8,313	5,743	2,456	114	2,264
Malta	2,280	1.500	230	550	360
Monaco		1,490	150	50	250
Northern Ireland	27,728	20,284	6,392	1,052	6.405
Norway		27,910	17,433	2.095	6.457
Poland.		27,500	7,000	4,200	7.000
Portugal.		21,000	10,040	1111111	2,500
Rumania	37,000	27,000	7,500	2,500	2.050
Spain	189,650	133,305	56.345		37,500
Sweden		108,650	39,500	3.000	59,000
Switzerland.	79,100	63,000	15,800	300	46,500
U. S. S. (Russia)			16,490	1.830	9.039
Yugoslavia			2,800	*****	4,300
Tetal 1930		3,774,161	1,343,760	*150,601*	2,430,378
Total 1929	4,815,050	*3,416,550	1,226,575	*134,629*	2,158,222
Increase.	472,422		°117,185	*15,972	*272,156

[†]Includes taxicabe buses and motor coaches.
*Not complete for all territories.
(a) Includes 38,678 miscellaneous vehicles.

OCEANIA

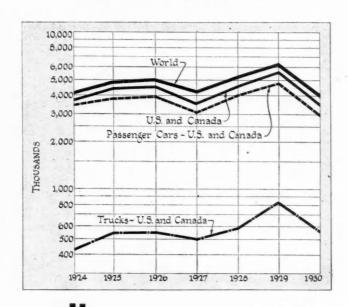
		20 415 4			
COUNTRY	Motor Vehicles 593,510	Cars 469,000	Trucks 122,400	Buses 2,110	Motor- cycles 93,000
Cook Islands	128	72	56		31
Fiji Islands	1,288	987	301	*****	180
French Oceania	511	451	60		40
Hawaii.	45,500	36,500	9,000		450
New Zealand	189,777	154,674	33,794	1,309	37,411
Other Oceania	500	250	250		
Samoa	446	331114	125.534		14
Total 1930	831,660	*661,934	*165,861	*3.419	133,126
Tetal 1929.	802,774	*643,188	*156,085	*3,501	*127,189
Incease	28,886	*18,746	9,776		*5.937
Increase, per cent	3.6	2.9	6.3	*****	*****

^{*}Not complete for all territories.

^{*}Not complete for all sections. El Automovil Americano and The American Automobile (Overseas Edition)

MOTOR VEHICLE

World Production





1930 Production Summary

Passenger Cars—	
United States	2,805,413
Canada	125,442
Commercial Cars—	
United States	540,521
Canada	28,750
Buses, U. S.	9,600
Taxicabs, U. S.	8,936
Motorcycles, U. S.	22,000
Tractors, U.S.	
Tires, U.S.	
Aircraft, U. S.—	
Commercial	1,937
Military	747
U. S. Foreign Assemblies	

Motor Vehicle Production-U. S. and Canada

	Passer	nger Cars	T	rucks	Cars a	nd Trucks
Year	Units*	Value**	Units	Value**	Units	Value**
1912	356,000	\$335,000,000	22,000	\$43,000,000	378,000	\$378,000,000
1913	461,500	399,902,000	23,500	44,000,000	485,000	443,902,000
1914	543,679	413,859,000	25,375	45,098,464	569,054	458,957,843
1915	895,930	575,978,000	74,000	125,800,000	969,930	701,778,000
1916	1,525,578	921,378,000	92,130	161,000,000	1,617,708	1,082,378,000
1917	1,745,792	1,053,505,781	128,157	220,982,668	1,873,949	1,274,488,449
1918	943,436	801,937,925	227,250	434,168,992	1,170,686	1,236,106,917
1919	1,657,652	1,461,785,925	275,943	423,326,621	1,933,595	1,885,112,546
1920	1,905,560	1,809,170,963	321,789	423,249,410	2,227,349	2,232,420,373
1921	1,518,061	1,091,752,452	164,304	169,914,098	1,682,365	1,261,666,550
1922	2,369,089	1,561,740,645	277,140	231,282,063	2,646,229	1,793,022,708
1923	3,753,945	2,274,554,488	426,505	317,478,940	4,180,450	2,592,033,428
1924	3,303,646	2,040,706,519	434,140	326,706,496	3,737,786	2,367,413,015
1925	3,870,744	2,544,528,799	557,056	470,634,763	4,427,800	3,015,163,562
1926	3,948,843	2,746,064,722	556,818	468,752,769	4,505,661	3,214,817,491
1927	3,083,360	2,265,633,102	497,020	435,072,641	3,580,380	2,700,705,743
1928	4,012,158	2,703,753,500	588,983	459,045,380	4,601,141	3,162,798,880
1929	4,794,898	2,981,141,842	826,811	595,504,039	5,621,709	3,576,645,881
1930	2,939,791	1,768,000,000	569,271	389,000,000	3,509,062	2,157,000,000

^{*} Includes Taxicabs.
** Wholesale Value.

PRODUCTION

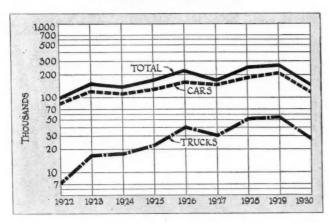
World Car and Truck Production¹

		1930*			1929**		1928**				
	Cars	Trucks	Total	Cars	Trucks	Total	Cars	Trucks	Total		
Austria	6,000	3,000	9,000	6,050	3,250	9,300	8,100	3,400	11,500		
Belgium			7,500	6,500	1,200	7,700	7,600	1,400	9,000		
Czechoslovakia	13,000	7,000	20,000	12,900	2,700	15,600	12,600	2,800	15,400		
Denmark			200	45	75	120	50	150	200		
France	181,260	41,119	222,379	110,000	65,000	175,000			200,000		
Germany	54,000	12,500	66,500	46,500	24,000	70,500	108,000	42,200	150,200		
Great Britain	150,000	50,000	200,000	178,000	54,000	232,000	179,200	53,200	232,200		
Hungary	200	100	300	420	250	670	500	400	900		
Italy	34,150	9,500	43,650	51,400	16,500	67,900	44,400	2,600	47,000		
Poland			600	100	570	670					
Spain			400	150	250	400	300	400	700		
Sweden	800	1,600	2,400	650	1,200	1.850	1,300	700	2,000		
Switzerland	200	1,100	1,300	175	1,100	1,275			2,100		
U.S.S. Russia			5,878			2,000					
United States and Canada		569,271	3,509,062	4,794,898	826,811		4.012,158	588,983			
Miscellaneous		****	1,000								
World Total	3,379,401	695,190	4,090,169	5,207,788	996,906	6,206,694	4,374,208	696,233	5,272,341		

^{*}The American Automobile (Overseas Edition) and El Automovil Americano. **Automotive Division, Bureau of Foreign and Domestic Commerce.

Canadian Production, 1930

Passenger Cars and Trucks



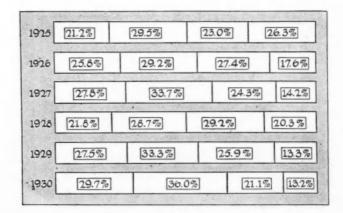
U. S. and Canadian Production

by Quarters

European Production Totals

																		Motor Vehicles
1930*			,			×	,		*	,		*		×	,	,		581,107
1929*																		650,000
1928*		×	i								×		1	*			*	589,900
1927													,					578,201
1926				*			,	- 12				 ,	. 8					529,343
1925					,		,											460,678
1924																		334.500

These figures do not include American cars assembled in European plants.



¹ Where Segregated.

^{*} The American Automobile (Overseas Edition).

PASSENGER CAR PRODUCTION



Passenger Car Production by Retail Price Classes

United States and Canada

With Number of Open and Closed Body Types

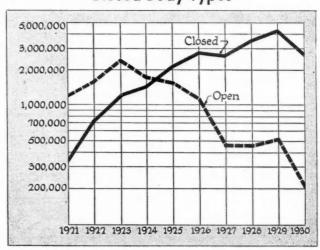
	Ui	nder \$1,00	00	\$1,0	\$1,000 to \$2,000		\$1,000 to \$2		\$1,000 to \$2,		\$1,000 to \$2,0		\$1,000 to \$2,00		\$1,000 to \$2,000		\$2,000 to \$3,000			\$3,0	00 and	Over	Total		
Year	Total	Open	Closed	Total	Open	Closed	Total	Open	Closed	Total	Open	Closed	Total	Open	Closed										
1920*	1,131,902	915,709	216,193	626,929	551,648	75,281	81,940	63,913	18,027	64,789	50,340	14,449	1,905,560	1,581,610	323,950										
1921	1,047,462	823,843	224,619	353,708	288,372	65,336	81,976	51,809	30,167	34,915	19,552	15,363	1,518,061	1,182,576	335,485										
1922	1,753,126	1,322,357	450,769	516,461	312,165	204,296	59,228	11,709	47,519	40,274	8,678	31,596	2,369,089	1,654,909	714,180										
1923	3,063,217	2,071,375	991,842	615,647	395,545	220,102	45,086	7,838	37,248	30,031	2,913	27,118	3,753,945	2,477,635	1,276,310										
1924	2,435,303	1,545,197	890,106	707,233	318,387	388,846	117,517	14,293	103,224	43,593	5,403	38,190	3,303,646	1,883,280	1,420,366										
1925	2,680,228	1,491,766	1,188,462	1,008,224	174,438	833,786	143,599	12,008	131,591	38,693	5,894	32,799	3,870,744	1,684,106	2,186,638										
1926	2,783,076	978,760	1,804,316	977,183	109,843	867,340	156,814	12,423	144,391	31,770	4,479	27,291	3,948,843	1,105,505	2,843,338										
1927	1,997,203	375,738	1,621,465	913,565	77,073	836,492	140,963	10,075	130,888	31,629	3,352	28,277	3,083,360	466,238	2,617,122										
1928	2,920,928	385,387	2,535,547	918,569	62,198	856,371	137,391	10,037	127,354	35,270	2,512	32,758	4,012,158	460,128	3,552,030										
1929	3,904,530	477,302	3,425,228	735,175	22,055	713,120	130,870	9,815	121,055	26,323	1,237	25,086	4,794,898	510,409	4,284,489										
1930	2,465,407	177,508	2,287,899	383,921	19,912	363,009	66,542	3,515	63,029	24,921	1,969	22,952	2,939,791	202,902	2,736,889										

^{*}United States only.

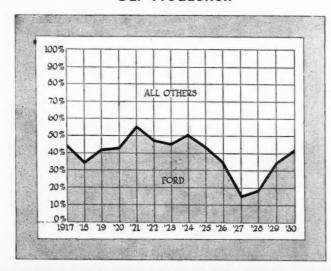
Passenger Car Production by Body Types

	1930	1929	1928
Roadsters	3.7%	7.8%	7.0%
Touring Cars	3.3%	4.6%	7.4%
Coupes	18.0%	17.2%	16.2%
Other Closed Cars	75.0%	70.4%	69.4%

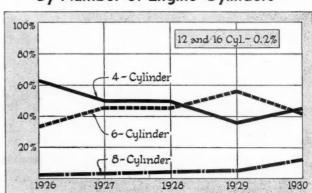
Passenger Car Production by Open and Closed Body Types



Ratio of Ford to Total Passenger Car Production



Division of 1930 Passenger Car Production By Number of Engine Cylinders





TRUCK PRODUCTION

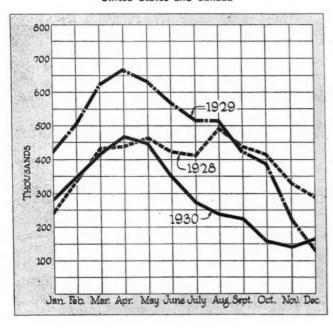
Truck Production by Capacities—United States and Canada

(Based on N.A.C.C. Data)

	1930		1929 1928				1927		1926	
	Number	%	Number	%	Number	%	Number	%	Number	%
34 ton or less	124,670	21.9	141,853	17.1	95,232	16.2	88,046	17.7	99,286	17.8
1 ton and less than 11/2	58,635	10.3	78,786	9.5	313,270	53.2	319,637	64.3	347,167	62.4
1½ ton and less than 2	289,189	50.8	523,691	63.4	112,171	19.0	29,107	5.9	47,000	8.4
2 ton and less than 21/2	30,740	5.4	28,416	3.4	30,456	5.2	27,313	5.5	19,993	3.6
2½ ton and less than 3½	42,126	7.4	33,530	4.1	21,813	3.7	16,584	3.3	18,231	3.3
3½ ton and less than 5	10,818	1.9	8,634	1.0	4,746	.8	4,471	.9	5,514	1.0
5 ton	2,277	.4	2,384	.3	2,219	.4	4,128	.8	9,030	1.6
Over 5 ton and special types.	10,816	1.9	9,508	1.2	9,076	1.5	7,734	1.6	10,597	1.9
Total	569,271	100%	826,811	100%	588,983	100%	497,020	100%	556,818	100%

Monthly Variation of Motor Vehicle Production

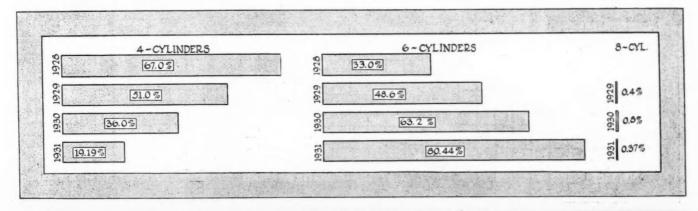
United States and Canada



Per Cent of Truck Manufacturers Using Stock Engines

Year											Use Stock Engines	Use Own Engines
1928			10							,	85.0%	15.0%
1929		×		*		,			,		86.4%	13.6%
1930							э.				82.2%	17.8%
1931			- 2								75.4%	24.6%

Truck Engine Types Offered, by Cylinders in Per Cent of Chassis Models Using Each

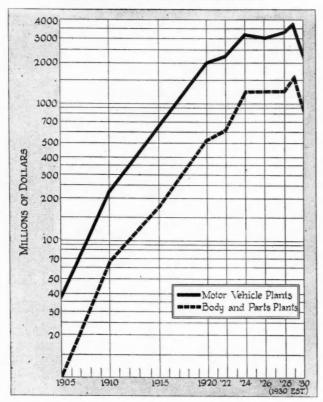




STATISTICS

Gross Value of Products

All Plants Producing Motor Vehicles, Bodies and Parts Based on 1929 Census of Manufacturers



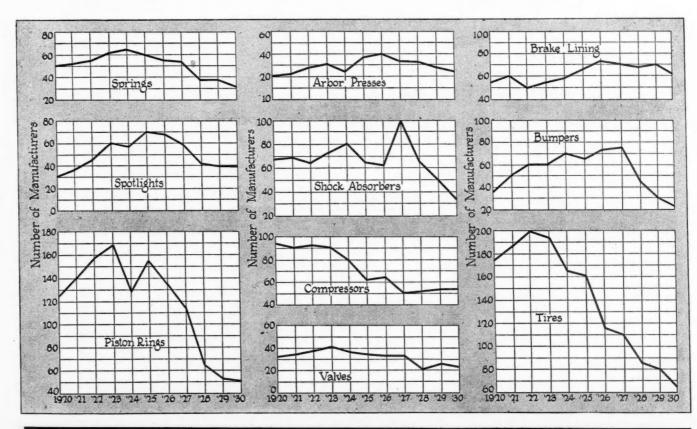
Material Used in the U. S. Automotive Industry, 1930

Per Cent of Total U. S. Manufacture Used in Automotive Industry*

Aluminum	23,500	tona	
Copper	85,000	tons	14%
Cotton Fabric (in tires)	198,516,000	lb.	
Glass, Plate			55%
Hardwood Lumber	1,180,000	bd. ft.	15%
Lead	141,100		24%
Rubber, Crude	488,774,000	lb.	82%
Steel (all types)	58,600,000	tons	15%
Steel (alloys)	560,000	tons	64%
Tin	12,000	tons	
Zine	25,000	tons	

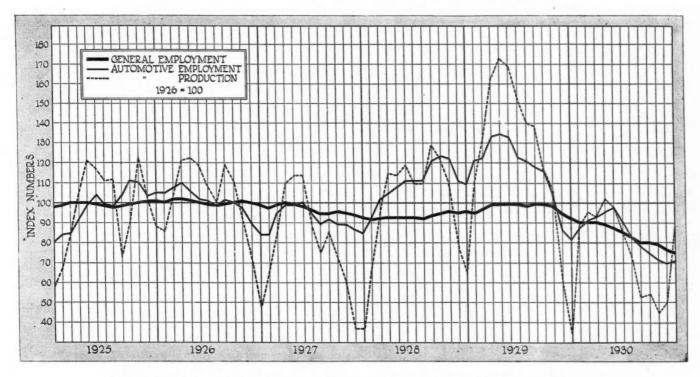
*N.A.C.C. Estimate.

Trends in Number of Manufacturers of Important Items



OF THE INDUSTRY

Comparison of Automotive and General Employment



Distribution of American Automotive Manufacturing Plants and Investments Abroad*

(Thousands of Dollars)

	E	urope	rope Canada			America	Asia a	nd Africa	New Zealand		
	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	
Automotive Vehicles	30	\$79,210	6	\$56,097	6	\$31,122		(1)		(1)	
Automobile Accessories	13	4,174	32	11,117		* * * *				* * *	
Agricultural and Industrial											
Machinery	51	59,724	46	60.320	6	8.324	8	19.333	7	18.962	

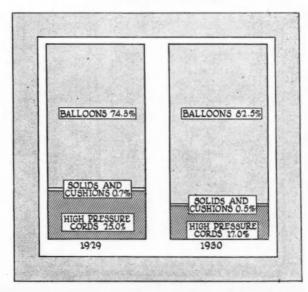
* U. S. Department of State Figures.

(1) Included in Agricultural and Industrial Machinery.

Tire Output by Types

Tire and Rubber Data

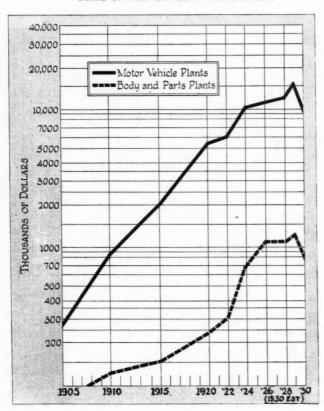
1	1930	1929	1928	1927	1926	
Crude rubber consumption for cas-						
ings, solid tires and tubes-millions						
of pounds	596	805	800	687	691	
Cotton fabric consumption for tires-						
millions of pounds	198	281	296	237	221	
Total pneumatic tire production-						
hundred thousands		747	779	644	615	
Solid and cushion tire production-						
thousands	255	553	684	744	750	
Inner tube production—hundred						
thousands	524	746	803	708	766	



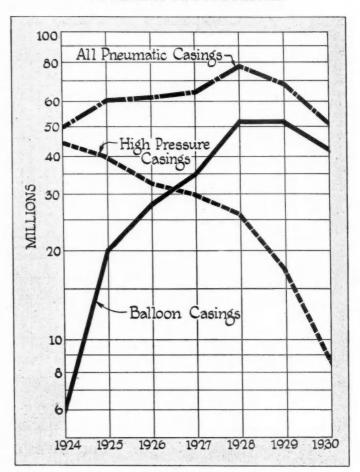


Gross Value of Products Per Plant

Mctor Vehicle—Body and Parts Based on 1929 Census of Manufactures



Pneumatic Tire Production



Number of Rims Inspected*

	192		193	
SIZE	No.	Pet.	No.	Pet.
Motorcycle				
24 x 3 CC	10,464	0.0	385	0.0
24 x 3 Std		0.0	132	0.0
26 x 3 CC		0.0		
26 x 3 Std		0.0		
28 x 3 CC			592	0.0
28 x 3 Std			****	
Balloon				
17 x 3.25			7,747	0.0
17 x 4			1,008	0.0
17 x 4½		* *	15,592	0.1
17 x 5			9,188	0.1
18 x 3.00			231	0.0
18 x 3.25	117,424	0.5	119,319	0.7
18 x 3½			868	0.0
18 x 4		5.6	1,008,872	5.8
18 x 41/2		1.2	126,599	0.7
18 x 5	112,545	0.4	82,911	0.5
18 x 6			16,745	0.1
19 x 2.75		3.3	2,430,685	14.0
19 x 3.00			640,859	3.7
19 x 3.25	330,558	1.4	25,923	0.1
19 x 31/2	586,287	2.4	189,166	1.1
19 x 4		17.3	1,550,741	8.9
19 x 41/2	0.00 407	4.0	560,400	3.2
19 x 5	000 000	0.9	138,435	0.8
19 x 6			6,067	0.0
20 x 2.75	F 000 FM0	21.8	32,500	0.2
20 x 31/2 .	70 041	0.3	58,688	0.3
20 x 4	1 700 007	6.6	133,501	0.8
20 x 41/2 .	950 904	1.5	119,189	0.7
20 x 5	004 170	1.0	16,622	0.1
20 x 6		0.1	2,406	0.0
21 x 2.75	104 000	0.7	1,847	0.0
21 x 3½	405 005	1.7	180,516	1.0
21 x 4	67 600	0.3	26,365	0.2
21 x 41/2 .	05 504		37,615	0.2
	6,527	0.0	1,966	0.0
	3,668	0.0	5,373	0.0
00 - 01/	170	0.0		
00 - 4	1 400	0.0	1.358	0.0
44 X 4 .				

	1641	OUCE	Manuacco	ta Ca D
SIZE	No. 192	Pet.	Nº 193	Pet.
22 x 4½	2,251	0.0	1,011	0.0
Drop Center			10	
16 x 3.62 F.	* * * *	A. W	19	0.0
17 x 3.25 E. 17 x 3.62 F.			22	0.0
18 x 2.15 B.	90 047	0.1	29	0.0
18 x 3.00 D.	28,947	0.1	67,715 83	0.4 0.C
18 x 3.25 E.			25,641	0.1
19 x 2.15 B.	23,322	0.1	32,273	0.2
19 x 2.75 D.	20,022	0.1	39,622	0.2
19 x 3.00 D.	195,693	0.8	6,114,088	35.2
19 x 3.25 E.			3,885	0.0
19 x 4.00 F.			8,141	0.0
20 x 2.15 B.	1,712	0.0		
20 x 4.00 F.	20,846	0.1	10,592	0.1
21 x 2.75 D.	1,785,100	7.4		
Semi-Drop				
Base Split				
17 x 3.25 E.			5 404	0.0
18 x 3.00 D.			5,404	0.0
18 x 3.25 E.			33,832	0.1
19 x 3.00 D.			125,359	
Clincher				***
30 x 3 —24 30 x 3½—23	318,787	1.3	77,617	0.4
31 x 4 -23	765	0.0		
		0.0	100	0.0
High Pressur				
30 x 3½-23	36,204		16,243	0.1
32 x 3½—25	1,056			* *
31 x 4 —23	1,086		****	
32 x 4 —24	31,131	0.1	8,764	0.1
33 x 4 —25 34 x 4 —26			****	
32 x 4½—23	55,420	0.2	12,190	0.4
33 x 4½-24	98	0.0		0.1
34 x 4½-25	4,224	0.0	4,324	0.0
36 x 4½-27			7,027	0.0
19" Taurel				
18" Truck	4.00	0.0	0.700	
28 x 5	177	0.0	3,103	0.0

Ruh	ber	Manufactu	rers A	ssociation.				
192		193			193	29	193	
No.	Pet.		Pet.	SIZE	No.	Pet.		Pet.
,251	0.0	1,011	0.0	32 x 7 34 x 8	315	0.0	537 227	0.0
		19	0.0	20" Truck				
		22	0.0	30 x 5	3,436,496	14.2	2,479,664	14.3
0.40	0.1	29	0.0	32 x 6	443,577	1.9	307,097	1.8
,947	0.1	67,715	0.4	34 x 7	173,043	0.7	206,171	1.2
		83	0.0	36 x 8	130,699		104,148	0.6
,322	0.1	25,641 32,273	0.1	40 x 10	1,323	0.0	****	
		39,622	0.2	40 x 10.50 .	1,287		1,218	0.0
,693	0.8	6,114,088	35.2	9/10-20	493	0.0	11,859	0.1
		3,885	0.0	42 x 11	247	0.0	938	0.0
		8,141	0.0	22" Truck				
,712	0.0			36 x 7	4,454	0.0	2,190	0.0
,846	0.1	10.592	0.1	38 x 8	13,809		16,962	0.1
,100	7.4			9/10-22		20.00	2,055	0.0
				24" Truck				
		5,404	0.0	34 x 5	7,062	0.0	3,436	0.0
		25	0.0	36 x 6	-31,467		9,371	0.1
		33,832	0.1	38 x 7	46,415		19,479	0.1
		125,359	0.7	40 x 8	75,487		50,131	0.3
		220,000		44 x 10	298		383	0.0
				9/10-24	432		5,419	
200	1.0	20,010		46 x 11	****		313	
765	1.3	77,617	0.4	Airplane		1111	-	
100	0.0	150	0.0	14 x 3 SS	2,327	0.0		0.0
				18 x 3 SS	1,669	0.0	563	0.0
.204	0.1	16.243	0.1	24 x 3 SS	581		433	
,056	0.0			23 x 3½ SS	3.007		514	
,086	0.0			27 x 3½ SS	4,095	0.0		
,131	0.1	8,764	0.1	26 x 4 Cl.	8,617			
				28 x 4 SS	1,546	0.0		
				29 x 4 SS	****			
,420	0.2	12,190	0.1	30 x 5 SS	221	0.0	****	0.0
98	0.0	****	**	32 x 6 SS 36 x 8 SS	904 756		209	
,224	0.0	4,324		44 x 10 SS	347		103 125	
		****		58 x 14 SS	****		8	
177	0.0	3,103	0.0	Total	24,143,485		17,364,096	

^{*}Branded by the Tire and Rim Association, Inc.

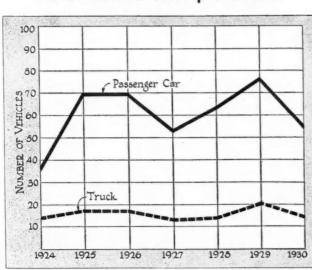
STATISTICS OF THE INDUSTRY



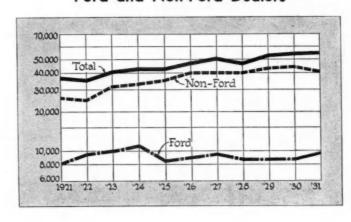
New and Used Car Financing Data(1)

Wholesale						AIL FI	NANCING					
Financing		TOTAL		N		1	U	SED CARS	1	UN	CLASSIFIED	
	Volume and Avera		erage		Volume and Av	erage		Volume and Av	erage		Volume and A	verage
Dollars	Cars	Total Amount	Per Car	Cars	Tetal Amount	Per Car	Cars	Total Amount	Per Car	Cars	Tetal Amount	Per Car
DATA NOT AVAILABLE	252,658 209,917 216,382 181,073	128,167,581 123,069,008 121,874,690 102,516,127 104,323,612 86,828,447	\$502 491 478 484 485 485 486 482 488 482 480 479	63,798 96,921 117,751 137,259 131,694 125,656 124,859 100,791 101,554	40,557,252 61,072,572 74,435,217 86,416,000 83,198,055 79,770,688 78,730,798 64,754,538 64,990,561 53,054,598	\$650 636 630 632 630 632 635 631 642 640 627 659	40,978 52,585 76,449 88,468 105,661 104,462 97,705 98,708 84,736 90,839 74,744 69,560	\$ 13,600,634 16,629,490 23,086,811 26,934,073 31,675,696 31,620,291 29,336,567 30,037,717 26,129,024 28,034,752 23,277,105 22,082,179	\$332 316 302 304 300 303 300 304 308 309 311 317	15,983 22,436 28,633 29,390 27,956 30,099 29,091 24,390 23,989 21,696	7,830,100 9,422,366 12,195,052 14,094,648 13,349,233 13,961,753 13,106,177 11,632,561 11,298,291	9 49 9 42 42 42 48 47 3 46 45 47 47 47 48
	2,469,658	\$1,196,544,696	\$484	1,198,156	\$ 761,179,460	\$635	984,895	\$ 302,444,339	\$307	286,607	\$ 132,920,89	7 \$46
47,962,644 61,170,730 74,884,909 72,291,505 63,412,417 61,839,467 69,959,084 60,194,63 44,633,376 21,001,694	191,078 305,839 411,755 402,897 387,157 391,461 350,477 300,907 278,258 5 210,834 171,896	91,241,901 142,117,146 172,811,264 184,938,915 180,098,333 180,845,490 163,896,492 129,447,399 8 126,590,020 195,000,640 80,089,099	465 420 459 465 462 468 430 455 451	103,680 166,455 205,603 213,121 204,17- 211,700 184,360 158,36- 132,450 96,39,74,33	61,978,964 61,978,914 61,938,139 61,25,283,993 71,24,761,957 61,111,299,256 61,372,682 62,58,245,687 64,493	598 582 569 588 598 604 593 607 604 647	76,724 121,512 185,340 169,103 164,385 162,723 149,858 127,946 135,060 104,211 89,943	24,663,101 37,900,986 47,221,842 51,103,985 50,379,886 49,104,714 45,849,945 29,558,260 41,724,621 32,260,071 28,674,442	521 312 255 302 306 306 302 306 307 310 319	10,674 17,872 20,812 20,666 18,598 17,031 16,254 14,581 10,744 10,231 7,614	4,599,83 7,328,66 8,651,28 8,550,93 7,680,50 6,978,81 6,747,28 5,938,22 4,492,71 4,494,87 3,353,16	6 43 6 41 3 41 7 41 4 41 9 41 5 40 7 41 8 43 3 44
77,547,82: 85,345,77: 83,659,77: 53,802,39: 55,429,93: 45,411,11: 45,386,95: 35,962,24: 29,634,07	316,029 346,089 2349,139 4341,489 287,449 247,57 2219,67 201,45	7 85,769,608 123,786,111 3 146,986,675 6 141,307,160 7 138,520,030 4 119,044,283 4 102,530,430 7 90,466,173 81,503,844 2 60,365,000	429 408 408 409 414 415 416 416 417 418 418 418 418 418 418 418 418 418 418	9 95,60 2 139,38 171,32 5 170,00 6 159,94 1 130,92 4 111,33 92,36 5 78,60 5 54,80	53,010,774 77,331,961 94,985,515 94,235,699 2 91,277,619 6 73,595,951 4 63,143,583 7 52,961,856 5 45,750,655 31,869,22	558 558 554 554 554 562 563 563 563 563 573 583 583 583	95,786 166,894 164,374 168,484 170,791 150,131 129,999 121,855 118,522 94,36	29,206,443 342,477,904 448,853,744 542,805,413 643,074,013 643,07	305 258 297 33 254 29 255 28 281 28 281 28 281 28 281 28 281	8,56 9,74 10,38 1 10,64 2 10,74 6 6,38 6 6,24 5,45 6 4,32	3,552,39 3,976,24 4,047,41 4,266,04 5,168,39 0,2,667,88 3,2,164,77 2,238,23 1,901,38	01 4 45 4 17 3 48 4 98 3 83 4 70 3 35 4 91 4 66 4
	Financing Volume in Dollars DATA NOT AVAILABLE \$ 36,899,813 47,962,644 61,170,730 74,884,999 72,291,569,599,084 60,194,62; 69,959,084 60,194,62; 61,244,844 77,547,82; 85,345,777 83,659,77 53,802,345,77 83,659,77 53,802,345,411,111 45,386,95 35,962,244 29,634,192,244	Financing Volume in Dollars Number of Cars 104,223 132,366 DATA 195,806 234,852 NOT 272,310 264,112 AVAILABLE 253,460 252,658 209,917 216,382 181,073 152,499 2,469,658 \$ 36,899,813 157,282 47,962,644 191,078 61,170,730 305,833 74,884,909 411,755 772,291,505 402,897 63,412,417 387,157 61,839,467 391,461 69,959,084 350,477 61,839,467 391,461 63,640,986 278,255 44,633,376 210,834 21,001,694 171,896 \$ 677,891,24€ 3,559,825 \$ 52,447,062 166,15 61,244,849 199,944 77,547,821,361 \$ 61,244,849 199,944 77,547,821,361 \$ 52,447,062 166,15 61,244,849 199,944 77,547,821,361 \$ 53,802,394 341,48 \$ 55,429,335 227,44 11,119 247,57 45,386,952 219,67 35,962,248 201,45 29,634,077 152,80	Financing Volume in Dollars	TOTAL Volume and Average Total Number of Cars Total Amount Car Total Amount Car Total DATA 195,806 93,581,752 478 484 485 484 485 484 485 486	Number of Cars NoT 195,806 93,581,752 478 96,921 13,564,342 484 117,751 132,186,344 485 137,259 485 131,694 485 131,694 485 131,694 485 131,694 485 131,694 485 131,694 485 131,694 485 131,694 485 131,694 485 131,694 485 131,694 485 131,695 486 121,874,690 486 125,656 121,874,690 486 125,656 121,874,690 482 124,859 104,323,612 485 100,791 104,323,612 485 100,791 104,323,612 482 101,554 485 131,693 486 125,656 181,073 86,828,447 480 84,633 152,499 73,058,197 479 63,251 485 101,554 485 131,693 486 170,793 305,839 41,194 478 103,686 461,170,730 305,839 41,17,464 485	Number of Cars Volume and Average Total Amount Per Cars Number of Cars Total Amount Per Cars Number of Cars Total Amount Per Cars Total Amount Tota	Total	Volume Inches Volume and Average Total Per Number of Cars Volume and Average Total Per Number of Cars N	Note	Number of Cars Volume and Average Total Number of Cars Total Amount Per Amount P	Volume and Average Number of Care Total Per Amount Per Amoun	Volume and Average Volume and Average Number of Cars Total Per Cars Total P

Motor Vehicle Sales per Dealer



Ford and Non-Ford Dealers



Estimated Retail Sales of Automotive Products for 1931

	of Total
Tire Replacements \$868,700,000	7.2
Accessories 460,000,000	3.8
Shop Equipment 87,260,000	0.7
Repair Parts and Supplies 1,555,000,000	12.9
Service Labor	19.4
Fuels and Lubricants 3,360,000,000	28.0
Commercial Cars 599,300,000	5.1
Passenger Cars 2,740,000,000	22.9
Total\$12,000,260,000	100.0%

⁽¹⁾ Department of Commerce.

* Of this number 37.0% were new cars, 60.4% used cars and 2.6% unclassified.



AIRCRAFT

United States Production and Sales of Airplanes by Types, 1930*

		PRC	DUCTION-		-		SALES	
		Per Cent	Net	Per Cent		Per Cent	Net	Per Cent
TYPE	Total	of Total	Sales Value	of Total	Total	of Total	Sales Value	of Total
Open Cockpit Biplane								
1 place	8	.41	\$58,300	.54	7	30	\$55,370	.47
2 places	421	21.73	1,103,641	10.27	412	17.73	1,102,592	9.45
3 places	646	33.35	1,926,943	17.93	790	33.99	2,222,353	19.04
Over 3 places	8	.41	77,426	.72	8	.34	81,098	.71
Total	1,083	55.90	\$3,166,310	29.46	1,217	52.36	\$3,461,413	29.67
Cabin-Single-Engined Biplane	20	1.04	\$285,880	2.67	19	.82	\$267,980	2.29
Multi-Motored Transport	7	.37	505,581	4.70	7	.30	505,581	4.34
Total Biplanes	1,110	57.31	\$3,957,771	36.83	1,243	53.48	\$4,234,974	36.30
Open Cockpit Monoplanes								
1 place	58	2.99	\$104,618	.97	49	2.10	\$101,658	.87
2 places	166	8.56	524,073	4.88	150	6.45	425,022	3.64
3 places	22	1.13	73,680	.68	22	.94	73,680	.63
Over 3 places	4	.22	29,619	.28	3	.12	15,990	.14
Total	250	12.90	\$731,990	6.81	224	9.63	\$616,350	5.28
Cabin-Single-Engined Monoplane								
1 place	4	.22	\$40,025	.37	3	.12	\$41,550	.35
2 places	29	1.49	115,870	1.09	25	1.07	94,810	.81
3 places	34	1.75	112,261	1.05	263	11.32	593,385	5.09
4 places	276	14.26	1,135,211	10.56	293	12.60	1,174,525	10.07
5 places	9	.46	86,729	.81	12	.52	104,364	.89
6 places	109	5.62	1,243,860	11.57	118	5.08	1,328,607	11.39
7 places	31	1.60	458,732	4.26	39	1.68	544,748	4.67
8 places and up	13	.67	224,855	2.09	10	.44	174,840	1.50
Total	505	26.07	\$3,417,543	31.80	763	32.83	\$4,056,829	34.77
Multi-Motored Transport	38	1.96	\$1,389,984	12.93	35	1.51	\$1,027,155	8.81
Total Monoplanes	783	40.93	5,539,517	51.54	1,022	43.97	5,700,334	48.86
Seaplanes	17	.88	954,386	8.88	23	.99	1,091,539	9.35
Amphibions	17	.88	294,369	2.75	36	1.56	639,362	5.48
Total—Sea and Amphibion	34	1.76	\$1,248,755	11.63	59	2.55	\$1,730,901	14.83
Total—Commercial	1,937	100.00	\$10,746,043	100.00	2,324	100.00	\$11,666,209	100.00
Total—Military	747	***	10,723,720	• • •	801		11,272,343	***
Grand Total	2,684	***	\$21,469,763		3,125		\$22,938,552	

Airplane Production *

(Commercial and Willtary)	
Units	Value
1928 4,761	
1929 6,034	\$44,457,300
1930 2,684	21,469,763
Airplane Engine Production * (Commercial and Military)	
Units	Value
1929 7,378	\$26,495,830
1930 3,766	17,078,916

^{*} Aeronautical Chamber of Commerce of America, Inc.

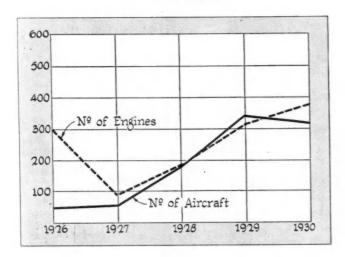
STATISTICS

Airports and Landing Fields by States*

State	Municipal	Commercial	Intermediate	Auxiliary	Army	Navy Miscellaneous Government,	Totals	State	Municipal	Commercial	Intermediate	Auxiliary	Army	Navy Miscellaneous Government, Private and State	Totals	State	Municipal	Commercial	Intermediate	Auxiliary	Army	Navy Miscellaneous Government, Private and State	Totals
Ala. Alaska Ariz. Ark. Calif. Colo, Conn. Del. D. of C. Fla. Ga. Idaho Ill. Ind. Iowa Kan. Ky. La.	5 1 21 61 15 0 0 21 13 7 13 14 22 16	52554551021103771161296	4 0 1 0 24. 5 1 0 0 1 5 1 0 1 6 0 1 6 0 1 7 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0	4 63 6 4 19 5 2 0 0 3 1 3 6 3 3 1 0 2 2	1 0 1 0 6 1 0 0 1 1 1 0 2 1 0 0	0 0 0 0 0 0 0 1 1 0 0 0 0 1 1 1 0 0 0 0	19 634 165 165 131 22 44 31 275 48 47 53 15	Me. Md. Mass. Mich. Minn. Miss. Mont. Neb. Nev. N. H. N. J. N. M. N. Y. N. C. N. D.	1 1 4 28 10 9 8 14 8 7 6 4 12 16 10 10 10	67 21 166 085 582 1 17 4 45 6 3 43	0 2 2 2 3 0 12 8 12 15 0 2 2 10 6 0 18	231422235010487108	0 3 0 0 0 0 0 1 0 0 1 1 3 1 0 4	0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 17 29 53 21 11 31 32 29 25 7 30 27 82 24 13 85	Okla. Ore. Penna. R. I. S. C. S. D. Tenn. Tex. Utah Vt. Va. Wash. W. Va. Wis. Wyo.	19 16 10 0 7 8 5 49 4 4 7 13 2 17 10	15 6 47 5 12 4 17 0 2 11 9 6 25 1	7 19 28 0 3 20 21 0 8 4 0 7 13	10 4 7 3 3 0 0 3 20 0 0 3 4 2 2 3 2 2 2	1 0 0 0 0 0 13 0 1 2 1 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	52 45 94 18 22 15 119 25 7 34 32 10 52 26

^{*}As of Dec. 31, 1930. Department of Commerce, Aeronautics Branch.

Aircraft Exports

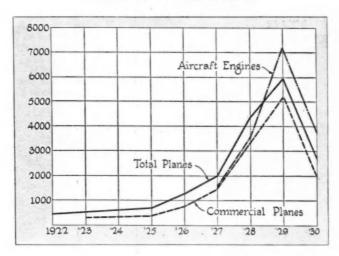


Airport Expenditures According to Population Classes of Cities *

Population Class	Average Investment per Airport	Total Expenditures to Date	Anticipated Expenditures 1930 (Last Half) and 1931
500,000 and over	\$779,385	\$40,528,000	\$8,287,000
100,000 to 500,000	284,452	35,272,000	7,610,000
50,000 to 100,000	186,754	12,886,000	1,195,500
25,000 to 50,000	52,595	6,627,000	1,349,500
5,000 to 25,000	42,327	16,126,500	1,157,500
Incorporated places under 5.000	10,053	3,629,000	625,500
-,		-,,	
Totals	\$103,386	\$115,068,500	\$20,225,000

^{*} As of Feb. 2, 1931, Department of Commerce, Aeronautics Branch.

Aircraft Production





Registrations of Aircraft, Gliders, Pilots and Mechanics, by States

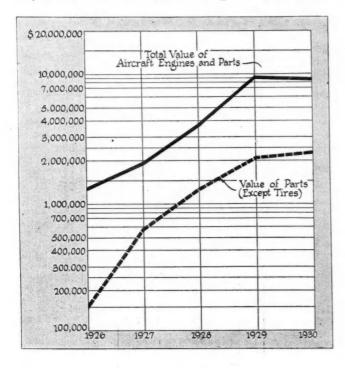
	Licensed	Unli- censed	Total	GLIDERS	Trans- port	Ltd. Com.	PILOTS Indus- trial	Pri- vate	Total	Glider Pilots	Mechai
											-
la	23	22	45	2 2	34	3		27	64		49
riz	30	8	38	2	18	11		54	83		37
rk.	51	21	72	005	33	16	2	71	122		57
alif	993	182	1,175	235	1,010	226	31	1,585	2,852	80	1,665
olo.	50	24	74	97	56	32		59	147		76
onn.	117	30	147	8	55	28	1	90	174		129
el	37	12	49	2	9	3		13	25		16
. C	68	5	73	10	189	9		72	270	6	144
la.	86	49	135	7	51	34	1	110	196		280
a	40	34	74	1	35	8		28	71	1	44
laho	19	7	26	5	13	8		15	36	1	20
1.	475	192	667	69	335	134	10	452	931	14	553
	157	88	245	30	119						
nd						47	1	158	325	3	144
wa	123	53	176	13	86	49		130	265	2	139
an	170	142	312	50	126	40	2	105	273	2	190
у	46	19	65	1	38	18	4.5	35	91		42
a	86	15	101	1	37	12	1	41	91		6
laine	29	17	46	1	24	9		34	67	1.0	2:
[d	76	20	96	9	50	27	1	80	158		115
lass	196	44	240	24	144	56	2	254	456	1	20
lich.	361	114	475	117	276	91	3	362	732	19	44
linn.	110	7	117	13	100	49	1	117	267	2	13
liss.	31	10	41	1	16	6	î	33	56		1
0	274	91	365	8	221	77	4	188	490	2	27
	43			0			4			2	
ont.		27	70		23	14		38	75	**	5
eb	153	93	246	7	74	23	* *	118	215		12
ev	10	1	11	2	3	2	1	7	13		1
. н	23	5	28	4	12	11		31	54	5	1
. J	198	103	301	35	125	47	2	230	404	6	30
. M	18	6	24	2	14	7		26	47		1
. Y	1.002	191	1,193	104	521	204	11	905	1641	14	87
. Car.	55	38	93	4	26	18		42	86	1	4
. D	39	34	73	2	27	9		28	64		2
hio	408	174	582	6	309	134		359	802	13	51
kla.	238	88	326	94	185	57	4	144	390	1	15
	68	51	119	8	76	27				i	
				37			8	77	180		10
a	410	88	498		216	132	8	454	810	1	40
. I	33	7	40	1 1	11	7		34	52	4.4	2
. Car.	13	26	39	2	23	7	1.2	16	46		1
. D	53	16	69	9	41	19	1	51	112		4
enn	82	35	117	6	60	22		61	143	3	7
ex	340	96	436	16	384	60	7	281	732	2	40
tah	27	13	40	3	51	4		21	76		6
t	16	3	19	1 1	12	9	* *	7	28		1
a	50	18	68	6	129	21	1	44	195	1	27
ash.	148	42	190	8	117	53	î	124	295		18
	32	11	43	3	20	17		32	69		2
7. Va	176	73	249	19	104	49	1				
7 is								131	285		9
уо	48	9	57	3	17	3		1.6	36		6
laska	14	5	19		5	4	* *	6	15		1
an	* *		* *		6	. 1		9	16		
. Z		2	2		42	1		1	44		6
en. Am.		1	1								
uba	2		2							1	1
. Н.		1	7		37	1		9	47		9
lex		î	i		12	î	-	5	18		1 "
				1 1	10		*				
			* *			8 ×			10		1
P. R	14.31	* *			4	* *		* *	4		
oreign					04			40			1
Misc.		2,464	9,818	1,088*	21 5,792	1,957	98	13	34		2
otal							no	7,433	15,280†	178	8,99

^{*}This figure includes 76 licensed gliders and 1012 unlicensed gliders.
†This figure includes 385 women pilots—35 Transport, 50 Limited Commercial, 297 Private.
‡This figure includes 5 women mechanics.
(As of Jan. 1, Department of Commerce, Aeronautics Branch).

STATISTICS



Export Value of Aircraft Engines and Parts



Number of Municipal and Commercial Airports Located in Cities of Various Sizes *

Cities of	Number of Cities in Class	Number of Municipal Airports	Number of Commercial and Private Airports	Total Number of Airports
Over 500,000	13	16	36	52
100,000 to 500,000	80	54	70	124
50,000 to 100,000	98	37	32	69
25,000 to 50,000	177	54	72	126
5,000 to 25,000	1,441	190	191	381
Incorporated places under 5,000	15,238	198	163	361
Totals	17,047	549	564	1,113

*As of Feb. 2, 1931, Department of Commerce, Aeronautics Branch.

Capital Expenditures on Airports *

1.5	Number in Class	Average Investment per Airport	Total Expenditures to Date	Anticipated Expenditures 1930 (Last Half) and 1931
Municipal air- ports Commercial and	549	\$106,033	\$58,212,000	\$15,779,500
private air- ports	564	100,809	56,856,500	4,445,500
Totals for both classes	1,113	\$103,386 (average)	\$115,068,500	\$20,225,000

*As of Feb. 2, 1931, Department of Commerce, Aeronautics Branch.

Distribution of Capital Expenditures as Reported by 450 Airports *

	Expenditures to Date	Anticipated Expenditures 1930 (Last half) and 1931
Land	\$45,949,500	\$2,321,486
Hangars	14,851,810	1,625,213
Clearing and grading	8,987,947	3,899,635
Administration and other build'gs	4,167,817	1,237,545
Hard surfacing	3,772,564	1,182,302
Draining	2,688,283	882,345
Shops, fire fighting and fuel equip-		
ment	2,663,705	275,185
Lighting equipment	1.947,906	520,598
Seeding and fencing	692,965	366,270
Miscellaneous	3,379,631	2,341,556
Totals	\$89,102,128	\$14,652,135

* As of Feb. 2, 1931, Department of Commerce, Aeronautics Branch.

Comparison of Airplane Production— Commercial (1)

														Units	Value
1929							×		*		*	×		5,357	\$33,624,756
1930						 *		× :		×		*	*	1,937	10,746,043

¹ Aeronautical Chamber of Commerce of America, Inc.

Comparison of Airplane Production— Military (1)

												Units	Value
1929	1	 		,				 		*		677	\$10,832,544
1930		, ,	,				,		,		*	647	10,723,720



AUTOMOTIVE

New Car Domestic Sales by Makes

	NEW-C	AR REGIS	TRATIONS	(Approx.)	PER	CENT	OF TO	DTAL		RAN	IK	
Make	1930	1929	1928	1927	1930	1929	1928	1927	1930	1929	1928	1927
Auburn Interests	13,600	19,300	11,500	10,200	.50	.49	.35	.37				
Auburn	11,700	18,500	11,500	10,200	.43	.47	.35	.37	27	22	26	25
Cord	1,900	800	0.17.000	222 422	.07	.02	10.05	10.00	34	39	* *	
Chrysler Motors	232,400	356,900	345,800	288,100	8.53 2.32	8.87 2.18	10.65 4.51	10.60	0	11		
Chrysler De Soto	63,000 36,500	87,500 61,700	146,800 15,000	159,600	1.34	1.54	.46	5.88	8 12	11 15	8 25	5
Dodge	66,300	119,800	153,700	128,500	2.43	2.96	4.74	4.72	6	7	7	6
Plymouth	66,600	87,900	30,300		2.44	2.19	.94		5	10		
Durant	22,200	49,400	73,800*	58,800¶	.82	1.23	2.29	2.17	19	16	12	12
Ford Interests	1,096,500	1,362,400	504,400	413,900	40.34	33.92	15.54	15.25				
Ford	1,092,000	1,356,000	498,200	407,200	40.17	33.76	15.35	15.00	1	1		2
Lincoln	4,500	6,400	6,200	6,700	.17	.16	.19	.25	31	33	30	28
Franklin	7,700	11,100	7,700	7,800	.28	.29	.25	.29	29	28	29	27
Gardner	**	2,100	3,300	3,400		.05	.10	.13		36	33	31
General Motors	937,200	1,315,700	1,340,400	1,154,700	34.48	32.79	41.34	42.53				
Buick	114,200	162,300	202,500	240,600	4.20	4.05	6.25	8.86			_	
Cadillac	12,500	15,500	18,800	19,400	.46	.38	.58	.71	24		-	-
Chevrolet LaSalle	640,500 $11,700$	807,300 21,000	794,700 19,400	670,500 $11,400$	23.56	20.12	24.51	24.70	26	-		
Marquette	12,800	16,000	13,400	11,400	.47	.40		.42	23			
Oakland	22,400	33,000	38,500	43,300	.82	.82		1.60	18			16
Oldsmobile	49,400	92,600	76,200	50,300	1.82	2.32	2.35	1.85	11	. 9		
Pontiac	70,800	163,800	190,300	119,200	2.61	4.07		4.39				7
Viking	2,900	4,200			.11	.11			33			
Graham-Paige	31,200	62,600	60,500	19,200§	1.15	1.57		.71	15	14	14	20
Hudson Motors	97,100	262,900	233,400	233,400	3.57	6.52		8.60				
Essex	65,600	198,000	183,400	173,700	2.41	4.91 1.61		6.40				
Hudson	31,500	64,900	50,000	59,700 54,100 †	.93			2.20			-	
Hupmobile	25,200	45,900	73,400†						1			
Jordan		2,300	4,400	6,600	477	.06			1	35	32	29
Marmon Interests Marmon	12,800 12,800	22,300 8,600	15,300 15,300	10,400 10,400	.47	.58		.38			24	
Roosevelt	12,000	13,700	10,000	10,400		.36		.00		27	,	
Nash	52,900	108,800	119,000	113,800	1.95			4.19	1			
Packard	29,300	46,200	44,400	32,500	1.08	1.15		1.19				
Peerless	4,200	8,600	8,000	10,200	.15							
_	11,900	17,900	22,100	22,900	.44							
Reo Studebaker Interests	65,500	94,400	116,700	104,200	2.41	2.35				20	21	10
Erskine	00,000	8,000	23,400	8,500	2.41	.20		.31		0.0		
Pierce-Arrow		8,700	5,900	6,000	.26	.21				-		
Studebaker	58,500	77,700	87,400	89,700	2.15						-	
Stutz Interests	800	3,100	2,500	3,000	.03	.07	.08	.11				
Stutz	800	1,000	2,500	3,000	.03			.11	35			
Blackhawk	11	2,100				.05				38		
Willys-Overland		206,700	245,800	151,200	2.52							
Whippet		168,000	198,000		.73		6.10	3.82			4	1 9
Willys Knight		38,700	47,8001	47,500‡	1.25			1 75	13			
Willys-Knight					.35							
an Others	9,400	16,700	10,600	17,100	.00	.41	.02	.64	28	3 24	1 2'	7 21
T-4-1-	9.719.000	4.017.900	9 949 000	9.717.700	1000	1000	1000	1000				-
Totals	2,718,000	4,015,300	3,243,000	2,715,500	100%	100%	100%	100%	0 .			

^{*} Includes Star.

‡ Includes Falcon and Stearns-Knight.

† Includes Chandler.

‡ Includes Jewett.

† Total of Star and Flint.

** Included in all others.

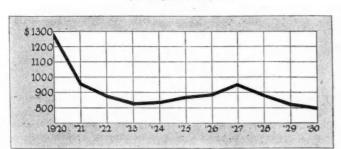
MARKETING DATA

1930 New Passenger Car and Truck Sales by States**

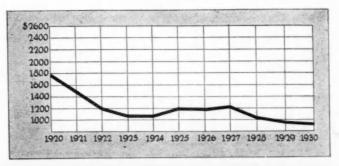
STATE	Passenger Cars	Per Cent of Total	Per Cent Loss 1930 Over 1929	Trucks	Per Cent of Total	Per Cent Loss 1930 Over 1929	Total Cars and Trucks
Alabama	26,400	.97	53	6,200	1.52	41	32,600
Arizona	9,300	.34	51	1,900	.46	39	11.200
Arkansas	20,000	.74	45	3,500	.86	56	23,500
California	190,900	7.03	28	26,900	6.57	13	217,800
Colorado	27,700	1.02	31	5,800	1.42	9	33,500
Connecticut	42,800	1.57	26	5.900	1.44	24	48,700
Delaware	7,500	.28	18	1,200	.29	14	8,700
District of Columbia	20,700	.75	14	1,800	.44	22	22,500
Florida	32,800	1.21	17	6,100	1.49	+13*	38,900
Georgia	28,600	1.05	33	5,000	1.22	27	33,600
Idaho	10,600	.39	36	2,400	.59	8	13,000
Illinois	169,000	6.22	31	20,100	4.92	24	189,100
Indiana	72,300	2.67	42	10,500	2.57	28	82,800
Iowa	79,700	2.93	29	10,000	2.44	12	89,700
Kansas	46,300	1.71	39	9,300	2.27	26	55,600
Kentucky	35,900	1.32	34	5,400	1.32	10	41,300
	27,100	1.01	40	4,700	1.15	36	
Louisiana		.68	23	4,700	1.10	6	31,800
Maine	18,600	1.40	21				23,100
Maryland	38,100			6,000	1.47	14	44,100
Massachusetts	108,100	3.97	22	13,700	3.35	19	121,800
Michigan	143,400	5.27	45	15,800	3.86	38	159,200
Minnesota	69,100	2.54	25	10,300	2.51	9	79,400
Mississippi	21,300	.78	44	5,500	1.34	21	26,800
Missouri	89,400	3.29	24	14,800	3.62	8	104,200
Montana	12,000	.44	47	2,600	.63	16	14,600
Nebraska	42,800	1.58	36	7,000	1.71	14	49,800
Nevada	3,600	.13	22	600	.15	33	4,200
New Hampshire	11,200	.41	21	2,300	.56	8	13,500
New Jersey	101,600	3.73	20	14,800	3.62	16	116,400
New Mexico	7,400	.27	38	2,000	.48	10	9,400
New York	275,600	10.15	20	38,700	9.45	18	314,300
North Carolina	35,000	1.29	47	6,500	1.59	32	41,500
North Dakota	13,300	.49	47	2,400	.59	41	15,700
Ohio	163,900	6.03	40	20,100	4.91	26	184,000
Oklahoma	55,000	2.01	43	8,100	1.98	37	63,100
Oregon	22,900	.83	36	4,200	1.03	28	27,100
Pennsylvania	206,200	7.59	26	30,100	7.11	22	236,300
Rhode Island	16,300	.60	26	2,100	.51	20	18,400
South Carolina	19,300	.71	40	3,700	.90	23	23,000
South Dakota	19,000	.70	40	3.100	.76	26	22,100
Tennessee	39,000	1.44	32	5,100	1.25	14	44,100
Texas	124,100	4.57	42	22,200	5.41	34	146,300
Utah	10,600	.39	39	2,200	.54	15	12,800
Vermont	9,100	.34	26	1,700	.42	15	10,800
Virginia	46,200	1.70	25	8,900	2.17	10	55,100
Washington	39,200	1.45	31	6,700	1.64	19	45,900
West Virginia	29,400	1.08	27	4,600	1.12	13	34,000
Wisconsin	74,700	2.75	30	12,100	2.96	16	86,800
Wyoming		.18	46	1,200	.29	20	6,200
Total	2,718,000	100%		410,300	100%		3,128,300

^{*} Gain. ** Approximate.

Passenger Car Prices (Average, Retail)



Truck Prices (Average, Retail)





MARKETING DATA

Sales Outlets and Population by States

		Whole Dat					RETAI	L DATA					
STATE	Population (1930 Census Report)	No. of Wholesalers*	No. Repair Shops per Wholesaler	Total Passenger Car Dealers*	Truck and Passenger Car Dealers (Incl. Ford)*	Exclusive Truck Dealers*	Ford Dealers (Car and Truck)*	Service Stations (Car and Truck Dealers)*	Independent Repair Shops*	Retail Supply Stores and Supply Depts.*	Total Retail Trade Names, Duplication Eliminated*	Motor Vehicles per Repair Shop	Passenger Car Sales per Pas- senger Car Dealer
Ala.	2,646,248	44	20	458	305	15	127	486	413	843	1,044	308	58
Ariz.	435,573	26	15	205	107	11	34	188	204	403	478	284	45
Ark	1,854,482	24	25	425	302	4	131	281	410	832	994	335	47
Calif.	5,677,251	371	18	2,107	1,203	137	348	1,849	4,622	5,812	7,752	307	91
Colo.	1,035,791	59	22	618	346	13	105	612	704	996	1,422	235	45
Conn.	1,606,903	90	14	619	260	25	53	641	640	1,100	1,494	271	69
Del.	238,380	7	22	74	28	4	18	70	82	111	189	368	101
D. C	486,869	22	9	62	19	12	12	75	139	116	286	808	33
Fla.	1,468,211	81	14	461	246	21	110	476	627	1,091	1,199	299	71
Ga	2,908,506	58	20	575	386	18	175	556	613	755	1,275	292	49
Idaho	445,032	28	18	314	203	11	71	310	206	490	561	233	34
III	7,630,654	268	22	2,907	1,298	77	480	2,875	3,073	4,290	6,866	276	58
Ind.	3,238,503	153	21	1,494	647	51	256	1,510	1,688	3,004	3,464	274	48
Iowa	2,470,939	108	29	1,904	1,180	33	348	1,812	1,455	2,475	3,579	240	42
Kan.	1,880,999	91	28	1,482	926	42	290	1,348	1,225	1,943	2,966	231	31
Ky	2,614,589	56	28	771	457	28	164	760	806	1,218	1,703	212	47
La	2,101,593	54	16	394	245	13	127	390	452	744	960	335	69
Me	797,423	31	29	443	209	8	76	407	509	327	1.072	198	42
Md	1,631,526	54	18	516	222	24	85	531	427	688	1,099	335	74
Mass.	4,249,614	188	14	1,247	514	55	166	1,226	1,517	1,471	3,470	311	87
Mich.	4,842,325	164	25	2,128	1,169	46	402	1,986	2,154	3,853	4,895	321	67
Minn.	2,563,953	87	35	1,835	1,123	33	357	1,724	1,326	2,899	3,426	238	38
Miss.	2,009,821	29	29	481	337	8	145	450	397	841	995	303	44
Mo	3,629,367	148	21	1,372	760	51	287	1,388	1,762	1,824	3,570	242	65
Mont.	537,606	33	24	455	277	15	79	416	368	686	887	175	26
Neb.	1,377,963	64	30	1,232	807	19	250	1,117	805	1,457	2,173	222	35
Nev.	91,058	4	43	118	75	1	21	107	67	166	202	170	31
N. H	465,293	15	39	275	124	6	41	272	325	354	651	187	41
N. J	4,041,334	136	26	1,396	578	86	166	1,515	2,012	2,471	4,345	241	73
N. M.	423,317	8	48	196	130	2	42	191	196	387	436	234	38
N. Y	12,588,066	499	17	3,590	1,649	220	474	3,658	4,814	4,982	10,560	273	76
N. C	3,170,276	68	23	716	448	20	186	720	897	1,292	1,684	294	49
N. D.	680,845	15	69	770	513	21	143	647	399	1,021	1,258	175	17
Ohio	6,646,697	329	19	2,855	1,366	118	455	2,877	3,506	5,064	7,374	282	58
Okla.	2,396,040	74	24	893	564	18	248	878	891	1,436	2,024	311	62
Ore.	953,786	70	20	507	281	13	100	486	943	1,166	1,637	181	45
Pa.	9,631,350	343	20	3,617	1,531	167	491	3,667	3,370	5,651	8,200	251	57
R. I	687,497	33	16	217	100	14	14	224	305	409	689	257	75
S. C	1,738,765	35	23	344	238	4	110	342	465	586	872	274	56
S. D	692,849	22	53	710	463	23	154	654	520	964	1,330	174	27
Tenn.	2,616,556	55	24	574	379	31	137	605	728	1,088	1,464	306	68
Tex.	F 004 F1F	201	26	2,079	1,234	52	495	2,086	3,207	3,685	5,889	257	60
Utah	FOR 0 45	27	19	227	138	10	48	228	291	472	613	215	47
		18		244	141	6	38	233	392	211	709	139	37
Vt. Va.		61	32	830	493	37	191	824	1,123	1,525	2,190	195	56
Wash.	1,563,396	134		822	411	37	152	815	1,476	1,970	2,703	197	48
W. Va.		62		690	389	33	109	692	853	1,322	1,794		43
\$\$75	0.000.000	113		2,161	1,164	54	343	2,069	1,237	3,117		239	
***				248	152	4	40	229	1,237		3,826		35
Wyo.		8								372	444	165	20
U.S. Total	122,775,046	4,668	21	48,658	26,137	1,751	8,894	47,771	54,785	79,980	118,713	260	55

^{*} Chilton Trade List.

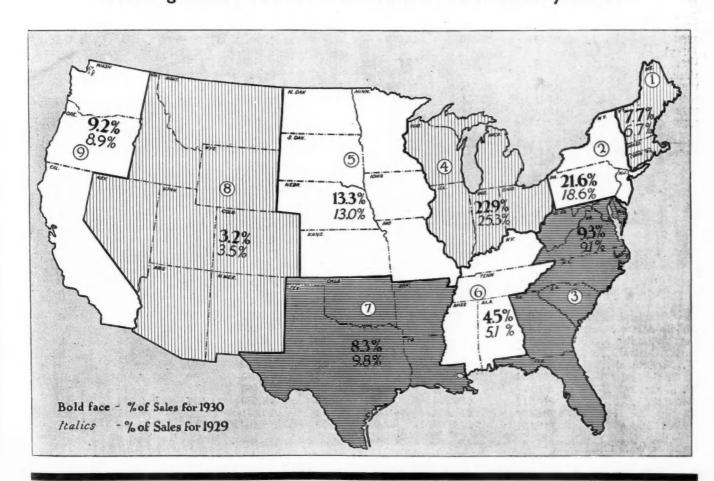
MARKETING DATA



New Commercial Vehicle Sales

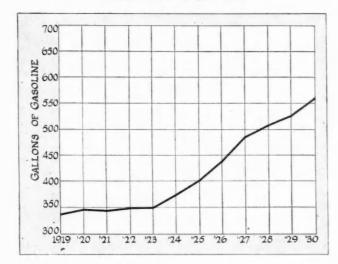
						Per				n.		
	4000	1000	1000	****	1000		otal	1005	1000		nk —	1005
Make	1930	1929	1928	1927	1930	1929	1928	1927	1930	1929	1928	1927
Atterbury		100	2.000	0.000	40	.03				24	4.0	::
Autocar	2,000	2,900	2,300	3,200	.49	.56	.66	.97	15	13	13	11
Brockway-Indiana	3,800	4,500	3,600	1,900	.92	.86	1.07	.57	10	11	10	12
Chevrolet	118,300	160,900	133,800	104,700	28.79	30.50	39.20	31.94	2	2	1	1
Diamond T	2,900	3,600	2,300	1,900	.71	.68	.67	.57	11	12	12	13
Dodge	15,600	28,600	36,600	42,300	3.80	5.41	10.70	12.94	4	4	3	3
Federal	2,100	2,800	3,100	3,900	.51	.54	.91	1.18	14	14	11	10
Ford	197,100	223,400	65,300	99,400	48.00	42.40	19.10	30.30	1	1	2	2
G.M.C	9,100	14,200	17,500	6,600	2.22	2.71	5.13	2.02	5	5	5	8
International	2,400	31,400	26,200	16,400	.58	5.98	7.64	4.98	12	3	4	5
La France-Republic	600	800	700	1,100	.15	.16	.20	.34	19	19	18	15
Mack	4,900	6,800	6,900	6,300	1.19	1.30	2.09	1.92	7	8	8	9
Moreland	400	700			.10	.14			21	20	1.0	
Pierce-Arrow		500	500			.09	.13	* *	* *	22	20	
Relay	500	700	600		.12	.14	.18		20	21	19	
Reo	6,400	12,900	16,300	10,300	1.56	2.45	4.77	3.15	6	6	6	6
Rugby	700	1,200	200		.17	.23	.04		18	18	21	* *
Schact	400	300			.10	.05	* *	* *	22	23		
Sterling	1,200	1,600	1,000	700	.29	.30	.33	.22	17	17	16	16
Stewart	2,300	2,200	2,000	1,500	.56	.41	.58	.47	13	15	15	14
Studebaker	1,600	1,700	1,000		.39	.32	.29		16	16	17	
White	4,400	6,100	6,300	7,100	1.07	1.17	1.84	2.17	8	10	9	
Willys-Overland	4,300	6,500	2,200		1.05	1.24	.66		9	9	14	
Miscellaneous	29,300	12,200	13,000	20,600	7.23	2.33	3.81	6.26	3	7	7	
									_	_	_	_
Total	410,300	526,600	341,400	327,900	100%	100%	100%	100%				* *

Percentage of Total U. S. New Motor Vehicle Sales by Zones





Gasoline Consumption per Motor Vehicle Computed From Registrations



Number and Per Cent of New Model Announcements by Months—1930

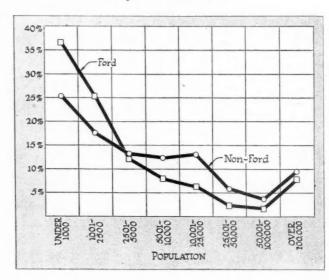
								-								
Month January	 											,	ĸ		odels 25	Per Cent
February	 													e		
March																
April															1	2
May															1	2
June									,						4	6
July			,							,					8	13
August															5	8
September															4	6
October .															4	6
November															8	13
December	 								a.			,	×		2	3
Total .						٠.									62	100

Number of Ford and Non-Ford Dealers *

	Ford Dealers	Non-Ford Dealers	Total Dealers
1919	7,640	23,230	30,870
1920	7,510	27,110	34,620
1921		28,740	36,710
1922	0.000	28,040	36,900
1923		31,380	41,250
1924	40 040	35,310	46,120
1925	0.010	36,020	45,030
1926	0.040	40,230	49,440
(May)	,		
1927	9,380	41,490	50,870
(Dec.)			
1927	8,948	40,606	49,590
1928	0 0 40	42,631	51,471
1929	0.010	43,970	52,580
1930	0.004	39,764	48,658

^{*} Chilton Trade List.

Ford and Non-Ford Dealer Representation by Town Sizes



Registrations, Sales and Dealer Outlet Data

Zone	Motor Vehicle Registrations Dec. 31, 1930	Passenger Car Sales by Zones 1930	No. of Car Dealers* Jan. 1, 1931	Pass. Car Sales Per Dealer in 1930	No. of Service Stations or Repair Shops* Jan. 1, 1931	Motor Vehicle Registrations per Service Station	No. of Accessory Outlets* Jan. 1, 1931	Pass. Car Registrations per Access. Outlet
New England	1,715,004	206,100	3,045	68	6,691	256	3,872	381
Middle Atlantic	4,940,457	583,400	8,603	68	19,036	260	13,104	318
South Atlantic	2,565,685	257,600	4,268	60	9,512	269	7,486	295
E. N. Central	6,429,090	623,300	11,545	54	22,975	280	19,328	290
W. N. Central	3,680,649	359,600	9,305	39	16,182	227	12,583	255
E. S. Central	1,237,334	122,600	2,284	54	4,645	266	3,990	273
W. S. Central	2,423,174	226,200	3,791	60	8,595	282	6,697	309
Mountain	970,317	86,200	2,381	36	4,459	217	3,972	210
Pacific	2,784,474	253,000	3,436	73	10,461	266	8,948	290
United States	26,746,184	2,718,000	48,658	55	102,556	260	79,980	290

^{*}Chilton Trade List.

DATA



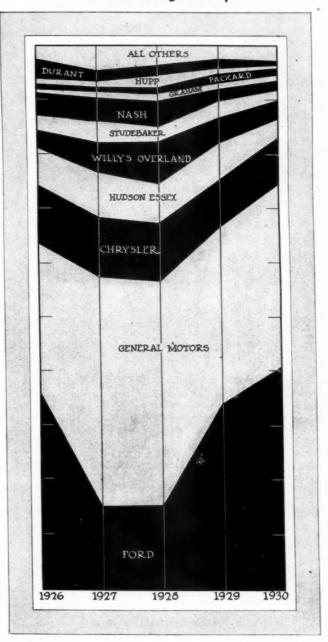
World Distribution of Automotive Sales Outlets *

(Excluding United States, Canada, France, Great Britain and Germany)

	Car Dealers and Distributors	Truck Dealers and Distributors	Service Stations	Accessory and Equipment Dealers and Distributors	Total Trade Units Without Duplication
Argentina	1,746 1,361	932 482	824 980	1,502 1,770	4,140 2,993
Austria	30	7	16	83 11	117 18
Belgium Bolivia	101 24	27 20	77 10	103 44	277 82
Brazil British East Africa.	641 42	422	168 27	486 87	1,187 87
British Guiana British Honduras	8 5	8 7	6	23 13	24 19
British West Africa British West Indies.	26 64	17 39	11 50	34 115	86 160
Bulgaria	10	3	1	38	47 86
Canary Islands	40 25	22 15	22 16	57 48	53
Chile China	178 148	118 196	99 86	285 220	602 327
Chosen Colombia Costa Rica	151	114	81 81	208	20 365
Cuba	22 259	14 211	$\begin{array}{c} 21 \\ 162 \end{array}$	65 384	86 718
Dunning	64 13	18	11	68 16	150 24
Denmark	229 40	182 27	255 19	1,305 63	1,548 104
Dutch East Indies Dutch Guiana	149	113	42	297 8	394 8
Dutch West Indies Ecuador	14 31	7 16	13	13 95	17 145
Egypt Esthonia	51 11	21	25 5	118 28	135 41
Finland French Indo-China French West Indies.	70 16	31 9	107	202	290 23
French West Indies. Greece	9 53	$\frac{1}{34}$	5 24	16 132	19 136
Guatemala	41	26 1	30	86 51	134 51
Hawaii	34 97	25 64	21 54	105 134	114 338
Honduras Hungary	21 26	6 9	16	21 60	42 106
India	308 111	227 42	142 36	673 309	853 516
Latvia Lithuania	2.2	13	11 3	32 10	50 17
Malaya Manchuria	53 29	20 21	25 16	127 48	161 53
Mexico	329 20	181	254	453 17	1,086
New Zealand Nicaragua	383 10	188	62	604 16	1,023
Norway	110 21	87	48	262 40	386 46
Panama Paraguay	18 13	8 11	19 11	46 22	71 43
Persia	11 147	10 108	12 111	28 254	31 400
Peru Philippine Islands Poland	34 61	23 32	18 28	120	147 111
Porto Rico Portugal	68	43	48	74 169	278
Rumania	29	58 14	19 16	194 73	372 73
Salvador Siam	31 19	18	11	72 39	124 39
South Africa Spain	303 452	184 284	325 328	391 828	916 1,476 430
Sweden Switzerland	276 86	242 10	58 73	136 134	186
Syria Turkey	30 22	11 8	17	62	73 79
Venezuela	104	148 75	142 48	$\frac{252}{154}$	756 281
Virgina Islands Yugoslavia	29	15	11	38	48
Miscellaneous	164	91	109	270	429
	9,544	5,500	5,405	14,450	25,935

 $^{\ast}\,\text{El}$ Automovil Americano and The American Automobile (Overseas Edition).

Per Cent of Total Sales by Leading Manufacturing Groups



See page 308 for detail data regarding this chart

General Motors includes

cadillac
Cadillac
LaSalle
Buick
Marquette
Oakland
Pontiac
Oldsmobile
Viking
Chevrolet

Willys Overland includes

Willys-Knight Falcon and Stearns-Knight Willys Whippet

Chrysler includes

Chrysler Dodge De Soto Plymouth

Studebaker includes

Pierce-Arrow Studebaker

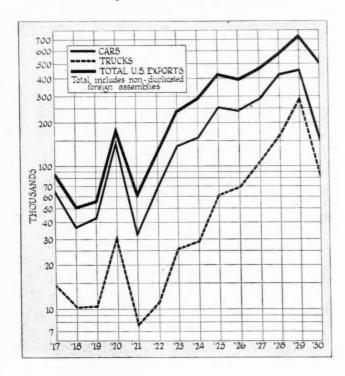
Durant includes Durant, Star and Flint

Ford includes Ford and Lincoln

Graham includes Paige and Jewett

EXPORTS—

U. S. Exports of Motor Vehicles



Total Foreign Consumption of Motor Vehicles of U. S. Design

Year	U. S. Exports Inc. For. Assem.	Canadian Production	Total Foreign Consumption
1914	27,574		27,574
1915	67,373		67,373
1916	85,364		85,364
1917	85,092	93,810	178,902
1918	51,260	82,408	133,668
1919	56,389	87,835	144,224
1920	177,297	94,144	271,441
1921	60,739	66,246	126,933
1922	125,880	102,053	227,980
1923	240,091	146,438	386,529
1924	293,115	135,246	428,361
1925	428,564	161,389	589,953
1926	393,600	204,727	598,327
1927	462,880	178,427	641,307
1928	582,764	242,382	825,146
1929	734,211	263,295	997,506
1930	407,278	154,192	561,470

Imports of Motor Vehicles Into **United States**

	No.	Value
1918		\$75.136
1919		123,025
1920	926	1,026,518
1921	522	876,163
1922		802,285
1923		884,125
1924	604	841,524
1925	678	1,079,560
1926		1.352,984
1927	635	1,218,938
1928		1,201,323
1929	750	1,190,140
1930	709	875.146

Yearly Exports by Units

				,			
	1930	1929	1928	1927	1926	Average Un 1930	it Value 1929
PASSENGER CARS							1000
From U. S From Canada	159,081 28,841	339,443 64,863	368,329 55,612	278,748 39,900	238,481 53,628		\$691.00 438.00
Total Pass. Cars	187,922	404,306	423,941	318,648	292,109	\$652.00	\$650.00
MOTOR TRUCKS							
From U. S From Canada	85,546 15,712	196,758 36,848	138,768 25,776	105,447 17,510	66,775 20,692		568.00 403.00
Total Motor Trucks	101,258	233,606	162,544	122,947	87,467	\$620.00	\$541.00
Total Cars & Treks.	289,180	637,912	586,498	441,605	379,576		
BRANCH ASSEMBI	LIES						
(Not otherwise repo							
Cars and Trucks	159,849	187,543	72,000	80,000	157,500		
Grand Total							
Cars and Trucks	449,029	825,455	658,498	521,605	537,070	6	
TIRES (From U.S.)							
Casings Inner Tubes	1,721,954	2,044,598	1,806,076	1,627,179	1,127,17	5 1.68	\$12.18 1.80
Solid	30,139	49,029	63,056	96,923	98,12	2 31.82	29.60
From Canada							
Casings	1,376,048	1,746,950	1,674,553	1,679,126	1,520,07	0 \$9.28	\$10.65
Inner Tubes Solid	1,211,042	6,166	12,596			8 1.30 1	1.37 27.00
OTHER AUTOMOT PRODUCTS	TIVE						
Motorcycles	10,262			19,469	22,67	0 \$235.00	\$228.00
Tractors	46,165						
(b) Auto. Engines.							
(c) Marine Eng's Motor Boat with			*******	*******	******		******
Engines	497		******			1 *******	*******
Trailers	1,284	1,038		928	97	0 497.00	460.00
Stor. Bat. (6-volt)						6.87	
Shock Absorbers							
Bumpers	. 18,153						
Gas & Oil Pumps	68,532	2 127,632	97,706				
Battery Chargers	10 100	40.000		•		**.	
(Under 15 amp.)	16,409	40,605	00,350				
Spark Plugs	0,440,200	0,820,320	4,000,302				
Brake Lining, ft Horns, Hand & El	118,38	134,792	2		******		
(b) Includes 19, (c) * Marine en types. (Porto Rico	rings inclu	de QOR Die	gel or gem	i-Diesel, 7,	241 deta	car engine	2,142 other

types. (Porto Rico and Hawaii included.)

This information is compiled from the official export statistics provided to this magazine by the Automotive, Rubber and Agricultural Implements Divisions, Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington, D. C., and the Dominion Bureau of Statistics of the Department of Trade and Commerce, Ottawa, Canada.

Foreign Sales of American Motor Vehicles



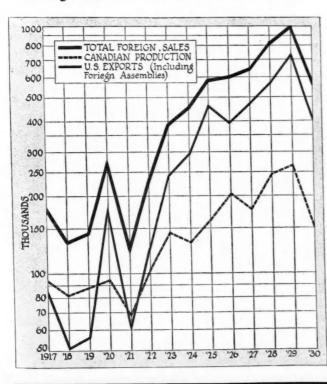
	Pa	ssenger Cars-			-Trucks		
	U. S. Exports Inc. Foreign Assemblies	Canadian Output	Total Cars	U. S. Exports Inc. Foreign Assemblies	Canadian Output	Total Trucks	Total Motor Vehicles
1921	. 48,478	61,098	109,576	12,179	5,148	17.327	126,903
1922	. 104,999	94,904	199,903	22,073	7,149	29,222	229,125
1923	186,448	129,228	315,676	48,629	17,210	65,839	381,515
1924	. 227,726	117,765	345,491	65,400	17,481	82,881	428,372
1925	. 321,893	135,573	457,466	106,774	26,397	133,171	590,637
1926	. 294,119	164,856	458,975	98,774	39,871	138,645	597,620
1927	. 332,036	146,827	478,863	134,348	32,227	166,575	645,438
1928	418,900	196,741	615,641	163,831	45,641	209,472	825,113
1929	451,095	207,498	658,593	282,721	55,797	338,518	997,111
1930	248,664	125,442	374,106	158,614	28,750	187,364	561,470

Foreign Assembly Plants and Sales

													No. of Foreign Assembly Plants	U. S. Foreign Assemblies
1922														45,444
1923													7	75,985
1924							×						10	105,547
1925													17	116,289
1926				8.	×	*						,	26	79,276
1927					,			4					33	72,265
1928													40	66,969
1929													68*	450,909*
1930				i					× .	×	×		66*	316,309*

 $[\]ensuremath{^{\circ}}$ Includes Canadian plants of American Manufacturers and their production.

Foreign Sales of U. S. Motor Vehicles



Value of Exports by Years

	PASSENGER CARS	1929	1928	1927	1926
	From United States\$110,038,542 From Canada 12,737,784	\$234,284,194 28,368,334		\$207,966,456 22,156,871	
	Total Passenger Cars \$122,776,326	\$262,652,528	\$288,755,730	\$230,123,327	\$202,260,961
	MOTOR TRUCKS				
	From United States \$ 56,754,976 From Canada 6,060,999	\$111,435,125 14,831,006	\$ 91,360,853 8,696,324		
	Total Motor Trucks. \$ 62,815,975 Total Carsand Trucks. \$185,592,301	\$126,266,131 \$388,918,659	\$100,057,177 \$388,812,907	\$ 76,398,006 \$306,521,333	\$ 54,036,666 \$256,297,627
	PARTS and ACCESSORIES				
	From United States (See Below From Canada \$ 1,587,571	(See below) \$ 2,350,232	(See below) \$ 2,152,082	\$ 99,335,620 \$ 3,434,465	\$ 83,927,732 \$ 5,485,486
d	Total Parts			\$102,770,085	\$ 89,413,218
	TIRES				

TIRES								
From U. S., Total \$ Casings Inner Tubes Solid.	33,396,322 29,544,526 2,891,291 960,505	8	32,727,361 27,593,926 3,671,856 1,461,579	38,945,410 33,066,491 3,797,836 2,081,083	\$	40,254,722 33,749,013 3,499,317 3,006,392	\$	30,839,589 24,358,907 3,024,177 3,457,505
From Canada, Total \$	14,352,652	\$	18,807,707	\$ 19,703,247	\$	20,495,892	\$	17,524,940
Casings\$ Inner Tubes Solid	12,773,773 1,578,879	8	16,385,869 2,255,370 166,468	16,735,971 2,605,729 361,547	-	16,913,065 3,143,901 438,926	-	14,645,309 2,567,105 312,526
Total Tires \$	47,748,974	\$	51,535,068	\$ 58,648,657	8	60,750,614	8	48,364,529

THER AUTOMOTIVE					
PRODUCTS					
Motorcycles\$	2,410,412	\$ 3,710,851	8 4,402,576 1	4,373,808 \$	4.915,949
Motorevele Parts and	-,,	. 01.101002	. 1110210101	. sjorojooo y	ale relete
Accessories	955,155	1,131,677	a contract to		
Tractors.	57,255,309	61,779,743	44.360,047	34,539,993	30,485,519
Cars and Trucks, Elec.	62,983	247,568	177,559	207,040	155,668
Automobile Engines	5,632,053	10,215,591	13,026,143	10.885,495	12,522,189
Marine Engines	4,538,759	3,914,757	3,097,623	2,056,081	1,721,726
Motor Boats with Eng.	819,450	0,022,101	0,001,000	2,000,001	2,122,120
Trailers.	639,516	477,346	396,403	419,172	339,987
Stor. Batteries (6-volt)	1,950,795	3,474,080	3,400,948	3,673,003	3,443,421
Fire Engines	75,648	146.032	0,200,020	0,010,000	0,770,72
Ignition and Sprk. plugs.			(See below)	2,006,610	1,904,103
Service Appliances	Dee Derow)	(Dee Delow)	(DEE DEION)		
Accessories, Automotive	4.814.473	8.056.089	7,683,138	6,994,081	6,861,740
Parts for Assembly	61,296,614	107,672,682		******	******
			62,421,406	******	*****
Parts for Replacement	43,118,423	65,156,817	60,333,587	******	***** **
Car and Truck Springs.	801,743	869,490	1 000 007	*******	
Ignition Parts	1,384,872	1,845,797	1,080,387	******	
Horns, hand and elec.	272,413	382,827	0.000.000	*****	*****
(a) Serv. & Gar. Equip.	3,185,506	3,381,472	2,258,713	******	******
Automotive Elec. Tools	1,221,989	62,091	2344444		
Tire Service Equipment	578,124		1,134,813	*******	
Automotive Wrenches	266,757		******	*******	*****
Gas and Oil Pumps	2,277,264	3,281,584	3,972,109	******	******
Battery Chargers					
(Under 15 amps.)	155,620		289,439	*******	
Shock Absorbers	453,505	772,030	1,253,992	*******	
Automotive Polishes	378,575	344,903	******	*******	
Bumpers	68,758		344,228		
Spark Plugs	1,730,241	2,098,114	1,417,344	******	
Brake Lining	1,426,721	1,520,585		* * * * * * * * * * * * * * * * * * * *	******
Total other Automot. Prod.	8107 771 676	\$200 and 604	2010 470 119		40 250 20

Grand Total \$431,112,953 \$722,660,331 \$662,085,759 \$535,197,305 \$456,425,70₂

(a) Not including air compressors, electrical tools, small hand tools, etc. (Porto Rico and Hawaii included).

~ V J · V

COUNTRIES	Up to	\$1,000	\$1,00	0-\$2,000	Ove	r \$2,000	Tota	l 1930	Total	al 1929	Total	al 1928
	No.	Dollars	No.	Dollars	Ne.	Dollars	No.	Dollars	Units	Dollars	Units	Dollars
Europe										İ		
Austria. Azores and Madeira Is Belgium	115	58,307	43	46,284	13	128,305	171	232,896	68	24,688	171	105,730
		22,646 4,626,668	3,864	15,311 3,667,101	26 572	55,926 1,333,114	98 15,360	93,883	12,970	41,437 5,144,631	5,629	33,691
Bulgaria Czechoslovakia Deamark	14 257	7,630 167,599	170	173,200	1 34	1,782 75,426	15 461	9,41z 416,225	73	48,708	60	51,793
ESCOMB.	231	3,083,842 14,553	978 15	954,772 16,707	83	203,419	8,780	4,244,033 31,260	4,802	1,974,985	4,472	1,983,283
Finland France Germany	562	36,861 361,368	146 768	145,215 850,949	25 268	56,711 660,228	244 1,598	238,787 1,872,540	418	414,537	786	749,210
Gioraltar	1	1,625,450 738	1,307	1,295,499	259	639,413	4,695	3,560,364	3,227 833	1,565,776 568,609	1,604 2,758	682,400 1,408,900
Gree-e	327	190,658 5,629	155 22	157,701	28	10,955 63,887	510	12,483 412,240	1,199	725,182	953	586,56
Iceland. Irish Free State	40 110	26,175 61,924	36	25,579 34,412	5	12,713	36 76	43,921 60,587	72 79	51,472 46,502	82 23	48,78 15,48
ItalyLacvia	419	219,461	19 156	18,832 166,416	22	60,166	129 597	80,756 446,043	19 327	18,321 169,537	83 430	51,68 21,24
Lithuania Maka, Gozo and Cyprus.	34 10	22,425 $10,323$	47 5	51,638 4,736		28,584	95 21	102,047	99	107,554	64	55,07
Netherlands	9 105	32,715 $1,221,488$	1,345	25,347 1,452,628	171	369,235	3,711	3,043,351	54 476	26,099 417,147	30 501	15,69 470,68
Norway Poland and Danzig.	480 166	304,175 97,239 211,473	510 89	520,613 98,123	50 24	101,592 51,824	1,040 279	946,380 247,186	585 1.427	673,214 1,038,714	541 613	686,97 418,00
Portugal, Rumania	215	211,473 $125,927$	436 257	457,975 235,911	53 25	116,015 51,436	812 497	785,463 413,274	1,103	795,057 1,193,103	877	602,09
Sovie: Russia in Europe.	1.474	444,710 739,442	139 1,135	181,972 1,191,325	82 216	238,528 495,000	1,114 2,825	865,210 2,425,767	1,824	1.003.551	1,267 278	724,64 389,69
Sweden	4,798 753	2,271,607 474,423	2,325 859	2,181,566 917,997	299 121	655,247 260,940	7,422	5,108,420	6,131 7,063	4,101,265 3,255,892	4,406 6,950	2,826,56 3,772,35 27,05
Swizzerland. United Kingdom. Yugoslavia and Albania.	3,791 134	1,868,033 80,806	1,194	1,199,479 106,811	199	469,400	1,733 5,184	3,536,914	178 17,555	142,307 6,249,262	8,163	3,841,35
North America	1	00,000	100	100,011	22	48,936	256	236,553	137	81,199	156	96,75
Alaska. Canada.	12 512	9 997 960	0.070	477 400			383	317,436				
Central America:		8,287,860	3,976	4,475,123	868	2,243,284	18,357	15,006,26	5,694	7,958,223	6,953	8,521,33
Costa Rica. Guatemala Honduras Nicaragua. Panama. Salvador	15 21	5,732 12,783	24	1,250 25,950	1 1	2,229 1,920	17 46	0,211 40,003	7 114	4,224 158,298	4 197	5,250 219,20
Honduras	70 106	33,776 55,889	43 40	49,337 48,246	8 5	19,986 9,272	121 151	103,099	140 131	158,648 166,344	269 55	388,13 49,71
Panama.	2,225	28,164 946,494	28 200	33,286 214,626	18	3,381 42,238	75 2,443	64,831 1,203,358	40	50,980	26	30,630
Salvader Mexico.	7,259	17,239 3,946,556	1,227	42,817 1,528,949	8 210	19,309	78 8,696	79,365 6,080,194	34	770,192 54,865	411	337,570 43,183
Mexico. Miquelon and St. Pierre Is Newfoundland and Labrador West Indies and Bermuda:	258	2,333 149,528	67				4	2,333	3,796	2,848,424	3,274	2,595,580
West Indies and Bermuda: Bermudas	1	512	6,	65,321	5	11,758	330	226,607	6	2,015	40	22,40
	11 401	11,122	12	12,162			31	512 23,284				
Trinidad and Tobago	58 151	313,077 36,250	74 44	79,260 41,514	3	6,481 1,763	697 103	398,818 79,527	350 114	230,054 67,768	193 75	193,383 65.308
Jamaica. Trinidad and Tobago. Trinidad and Tobago. Cuba. Dominican Republic.	2,824	55,510 1,377,377	19 435	18,947 525,464	119	16,088 322,300	3,378	90,545 $2,225,141$	78 2,590	44,789 1,616,687	98 1,407	56,35 1,530,75
Dutch West Indies	200	111,071 97,662	26 71	26,747 77,069	13	32,612	285 272	170,430 176,586	196 306	124,778 249,005	328 153	269,37 157,34
French West Indies. Haiti, Republic of. Virgin Islands of U. S.	193 163	93,006 76,934	37 51	32,497 52,223			230 214	125,503 129,157	105	51,685	57	32,510
	30	15,713	3	3,366			33	19,079	67	62,806 4,760	107 13	102,880 11,65
South America	11,037	4,997,570	3,520	3,604,772	140	4 000 000		0 695 495				
Bolivia	20 347	13,765 181,410	22 213	22,972	449	1,033,093 9,881	15,006 46	9,635,435 46,618	19,915 224	13,648,276 240,035	15,771 94	12,256,548 126,070
Brazil Chile Colombia	772 81	461,513	820	222,892 863,259	89 104	212,482 232,889	1,696	616,784 1,557,661	18,857 2,378	8,021,749 2,377,110	14,306 1,209	7,560,71 1,385,95
Colombia Ecuador British Cuisso	0.0	22,614	147 54	182,531 66,250		48,468 8,188	248 94	279,962 97,052	912 199	1,136,176 160,990	1,314	1,999,61 71,72
British Guiana Dutch Guiana French Guiana Paraguay Peru	18	722 7,773	10	9,205 6,092			11 24	9,927 13,865				
Paraguay	15 59	9,955 31,344	11	10,948	1	3,700 1,848	16 71	13,655 44,140	129	79,283	141	120,22
		126,762 638,953	185 322	184,634 349,112	14 57	31,724 121,651	406 1,690	343,120 1,109,716	1,242 567	764,303 506,765	714 661	604,824 765,47
Uruguay. Venezuela	3,004 2,031	1,237,805 918,619	307 526	319,206 574,483	44 170	101,061 394,872	3,355 2,727	1,658,072 1,887,974	3,478	2,002,696	1,558	1,039,65
Asia				-11200	1.0	971,012	2,121	-,,-1	1,607	1,308,302	905	838,52
Aden. Arabia	5 131	2,557 54,215	3 29	3,025		48 000	8	5,582	41	16,697	9	12,30
British East Indies: British India.	3,112	1,534,881	934	32,051		17,869	171	104,135	200	195,630	278	169,31
British Malaya. Ceylon	195	143,145	164	937,775 168,405	1	196,595 2,347	4,132 360	2,669,251 313,897	8,304 296	3,798,039 218,212	5,340 121	3,314,400 128,410
China. Java and Madura.	442	51,321 293,857	51 119	48,412 132,324	10	3,026 22,310	134 571	102,759 448,491	1.566	525,419 1,461,467	415 899	433,777 764,13
Dutch East Indies, Other. French Inde-China	1,646	854,403 105,529	607 182	581,210 184,113	19	56,154 40,891	2,281 362	1,491,775 330,533	5,871 360	2,705,870 275,181	5,310 316	2,580,89° 266,57°
Hawaii	3,985	37,735 2,345,943	14 266	15,237 372,243		135,453	96 4,303	52,972 2,583,639	219 547	98,627 666,095	33 668	16,62 836,78
Hong Kong. Iraq.	71 80	52,549 32,530	48 42	57,264 44,710	3	9,025 1,848	122 123	118,838 79,088	123	94,800	97	81,68
Japan. Kwantung	4,002	1,995,587 58,083	545 16	599,352 15,936	53	123,672	4,600	2,718,611 75,756	3,447	2,226,265	2,024	1,728,56
Palestine.	90	53,796 130,157	66	71,024 19,481	5 2	1,737 9,348	96 161	134,168		245,421 (1) 671,308	(1) 565	80,21 (1) 547,26 322,77
Persia. Philippine Islands. Siam.	2,401 106	1,381,891 80,331	425 39	506,585	53	3,839 131,770	2,879	153,477 2,020,246	851 3,532	419,604 2,273,897	2,153	1,370,74
Siam. Soviet Russia in Asia. Syria.	4 258	1,700	1	39,428 1,457	1	14,743 1,888		134,502 5,045	196 34	156,997 36,354	143 10	98,94 6,89
Turkey in Asia	1,677	163,303 694,367	105 52	107,270 52,741		4,424 7,767	365 1,732	274,997 754,875		771,066	733	395,01
Other Asia				*******		, , , ,				,000	.00	000,01

⁽¹⁾ Including Syria.

CAR EXPORTS



	Up to	\$1,000	\$1,000	-\$2,000	Over	\$2,000	Total	1930	Total	1929	Teta	1 1928
COUNTRIES	No.	Dollars	Ne.	Dollars	Ne.	Dollars	No.	Dellars	Units	Dollars	Units	Dellars
Oceania		. 1	1	İ		II		11	I	1		
Australia	3,288	1,297,972	519	514,754	59	129,114	3,866	1,941,840	57,198 23	12,397,683	17,305	8.359,29
British Oceania	8	4,570	4	4,845	1	2,745	13	12,160		15,058	32	20,12
French Oceania	1 7	8,369	3	4,373	1	1,000	21	13,742	13	8,010	9	8,22
New Zealand	1,606	928,307	805	820,790	39	83,389	2,450	1,832,486	3,134	1,974,637	2,306	1,409,41
Africa						11		11				
Ethiopia	- 19	8,958					19	8,958				
Belgian Congo	68	38.629	8	8,649			76	47,278	247	150,319	140	73.89
British East Africa	104	62,270	116	110,450	2	4,894	222	177,614	315	274,345	486	442,15
Union of So. Africa	5,193	2,561,489	2,225	2,234,003	78	163,236	7,496	4,958,728		*********		
British South Africa, Other	71 42	49,997	17	17,565		********	88 57	67,562 39,613	5,607	2,840,179	4,475	2,904,30
Gold Coast		23,131 22,670	15	16,482 6,991		2,500	52	32,161	*******		*******	
British West Africa	1	438	0	0,991	1	2,000	1	438	99	77,279	1,362	1,328,55
Egypt	817	385,962	365	400,280	49	117,377	1,231	903.619	2.088	942,698	1,302	572,18
French Africa:	01.	000,000	000	100,200	1	221,011	2,201	000,010	2,000	012,000	1,201	012,10
Algeria and Tunisia	43	26,090	34	35,937	2	4,121	79	66,148	96	76,568	43	19,65
Madagagear	3	1,509				********	3	1,509				
French Africa, Other	112	60,702	49	47,341	1	2,035	162	110,078	374	198,741	154	82,23
talian Africa	14	5,705				*********	14	5,705				*********
iberia	1	359	147	141.359	10	19.743	319	359 255,686	860	5,008	41	44,94
Morocco	162 52	94,594 30,789	32	29.818	10	6,242	88	66,849	134	533,436 138,786	747 158	426,2 110.0
Mozambique. Portuguese Africa, Other.	43	25,032	17	16,733	2	0,242	60	41,825	217	119,570	122	
Canary Islands.	54	35,608	65	69.727	4	9,118	123	114,453	187	142,040		
Spanish Africa, Other	9	4,881	11	12,861		*******	20	17,242	27	21,080	28	
ALL OTHER COUNTRIES	,,,,,,,,							**********	774	366,942	308	185,69
TOTAL	116,765	58,532,612	36.885	38,447,908	5,431	13,058,022	159,464	110,355,978	197.872	112,698,385	140,111	92,923,7

Department of Commerce, Automotive Division.

Ratio of U. S. Exports to Production

			Per	Cent	Expo	rted		
	1930	1929	1928	1927	1926	1925	1924	1923
Passenger Cars	5.4	7.4	9.6	9.5	6.2	6.4	4.6	3.4
Trucks	15.1	26.1	26.1	23.6	13.6	11.8	7.1	6.6

AMERICAN TRUCK EXPORTS

COUNTRIES	Up to	1 Ton	1 to 2	2 Tons	Over 2	½ Tons	Total	1930	Tetal	1929	Total	1928
COUNTRIES	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars	Ne.	Deliars	Ne.	Dellars
urope												
ustria	5	3,566	53	34,012	8	9,685	66	47,263	68	24,688	171	105,73
ustriazores and Madeira Islands	17	10,205	18	11,558	*******	*********	35	21,763	74	41,437	57	33,6
elgium	3,381	1,285,108	3,435	1,623,465	239	327,170	7,055	3,235,743	12,970	5,144,631	5,629	2,277,0
ulgaria	70	40 000	31	15,243	6	6,084	37 92	21,327	73	48.708	00	*******
zechoslovakia	1.582	42,323 608,647	3,063	15,869 1,327,325	142	2,157 177,018	4,787	60,349 2,112,990	4.802	1,974,985	4,472	51,7
stonia.	53	39,096	62	78,213	122	1.989	116	119,298	2,002	1,374,900	2,2/2	1,983,2
inland	51	38,418	177	173,565	2	3,004	230	214,987	418	414.537	786	749.
rance		110.886	1,099	441,580	107	14,329	1.492	700,795	3,225	1.565.776	1.604	682
ermany	279	129,218	583	302,525	147	236,462	1.009	668.205	833	568,609	2,758	1,408.
reace.	277	159,847	210	134,665	14	20,128	501	314,640	1.199	725,182	953	586,
lungary	14	9,247	3	4,570			17	13.817	72	51,472	82	48.
celand	28	17,705	46	22,968	4	2,698	78	43,371	79	46,502	82 23 83	15.
rish Free State	11	5,306	69	30,310			80	35,616	19	18,321	83	51,
aly	33 57	19,192	102	48,112			135	67,304	327	169,537	430	214,
atvia.	57	39,771	96	118,958	4	7,584	157	166,313	. 99	107,554	64	59,
ithuania	21 34	14,170	4	4,848			25	19,018		00 000		
Malta, Gozo and Cyprus Is	397	20,512	65	30,031		24 420	1,446	50,543 884,380	54 476	26,099 417,147	30 501	15,
orway.	219	226,600 145,473	1,035 255	626,342 231,698	14 51	31,438 77,530	525	454,701	585	673,214	541	470,
oland and Danzig.	114	60,311	298	142,424	01	2,493	413	205,228	1,427	1 038 714	613	686, 418.
ortugal.	188	131,438	219	257,161	36	66,663	443	455,262	1.103	1,038,714 795,057	877	602.
umania	118	80.329	66	61,460	1	6.765	185	148,554	1.733	1.193.013	1,267	724
aviet Russia in Europe	236	98,685	1,495	884,345	133	451,514	1.864	1,434,544	1,824	1,003,551	278	389
oviet Russia in Europe.	1.180	775,506	1,788	1,741,888	354	512,355	3,322	3,029,749	6,131	4,101,265	4,406	2,826.
weden	1.787	725,373	2,526	1,364,157	211	252,994	4.524	2,342,524	7,063	3,255,892	6,950	3,772.
witzerland	165	107,108	63	78,452	6	12,233	234	197,793	178	142,307	27	27.
nited Kingdom	2,632	1,075,315	266	238,012	98	141,378	2,996	1,454,705	17,555	6,249,262	8,163	3,841
Tugoslavia and Albania	79	54,971	32	29,206			111	84,177	137	81,199	156	96.

^{*} Includes Faroe Islands

AMERICAN TRUCK EXPORTS—Continued

COUNTRIES	Up to	1 Ton	1 to 23	2 Tons	Over 2	1/2 Tons	Total	1930	Total	1929	Total	1928
COUNTRIES	No.	Dollars	No.	Dollars	No.	Dollars	Ne.	Dellars	No.	Dollars	No.	Dellars
North America												
aska	1,541	1,055,216	1,600	2,441,088	737	1,970,110	3,878	106,156 5,466,414	5,694	7,958,223	6,953	8,521,3
entral America: itish_Honduras			2	1,150			2	1,150	7	4,224	4	5,2
esta Rica	29	613 17,964	14	9,636 55,892	2 6	5,993 23,153	17 79	16,242 97,009	114 140	158,298 158,648	197 269	219,
onduras	33	23,596	44 45	36,193	4	9,821	82	69,610	131	166,344	55	388,
caragua	17 340	8,523 117,496	1,269	12,926 617,055	38 24	116,785 62,011	1,633	138,234 796,562	1,444	50,980 770,192	26 411	30,
lvador	1,121	4,827 638,778	2,300	11,848 1,717,720	137	331,419	17	16,675 2,687,917	34	54.865	21	43.
exice.	2	1,210	1	714		331,419	3,558	1,924	3,796	2,848,424	3,274	2,595,
ewfoundland and Labradorest Indies:	21	8,008	38	23,297			59	31,305	6	2,015	40	22,
rmudas	7 3	8,561	3	2,135	1	5,597	11	16,293	306	249,005	98	56,
rbadosmaica		1,494 31,720	257	4,897 185,381	6	12,269	310	6,391 $229,370$	350	230.054	193	193,
rinidad and Tobago	34 14	22,059 9,173	32 41	18,598 23,805	3 2	5,863	69	46,520	114	67,768	75	63.
maica rinidad and Tobago ther British West Indies uba.	280 23	153,225	2,025	1,050,361	28	2,262 73,525	2,333	35,240 1,277,111	2,590	44,789 1,616,687	1,407	56, 153,
ominican Republic	20	15,119 43,132	53 97	37,516 67,026	1 15	1,953 37,550	2,333 77 178	54,588 147,708	196	124,778	328	296,
rench West Indies	34	18,597	81	39,143	2	1.116	117	58,856	105	51,685	57	32,
aiti, Republic of	29	16,136 300	85 2	48,257 953	1	2,411	115	66,804 1,253	67	62,806 4,760	107	102,
outh America								2,200		4,700	10	44,
gentina.	2,062	1,124,675	3,859	3,116,059	646		6,567	5,945,331	19,915	13,648,276	15,771	12,256,
olivia razil		28,362 137,802	116	26,096 192,26	67	5,023 201,820	52 575	59,481 531,891	224 18,857	240,035 8,021,749	14,306	7,567
razil hile. olombia	239 58	167,224 33,527	530	491,721 64,404	141 26	280,463 57,528	910 148	939,408	2,378	2,377,110	1,209	1,385
cuador	23	16,548	91	64,967	20		116	155,459 83,343	912 199	1,136,176 169,990	1,314	1,999
ritish Guiana	4	1,875	4 2	3,652 970			4 6	3,652 2,845				
rench Guiana. araguay.	6	2,803					6	2,803				
araguayeru	31 95	16,180 62,553	100 64	46,126 55,033	1 2	1,478 2,983	132 161	63,784 120,569	129 1,242	79,283 764,303	141 714	120, 604,
orto Kico.	151 281	78,332 130,270	392 899	233,511 481,993	46 40	110,383	589	422,226	567	506,765	661	765
ruguay. enezuela	378	200,267	1,310	795,596	106		1,220 1,794	686,975 1,266,798	3,478 1,607	2,002,696 1,308,302	1,588 905	1,039 838
Asia												
denrabia	24	397 10,473	91	1,406 47,273			115	1,803 57,746	200	16,697 195,630	9 278	12
British East Indies:	4.838	2,210,440	1,493			20.040						169
British India.	130	73,906	5	676,074 4,471	12	23,646	6,343 135	2,910,160 78,377	8,304 296	3,798,039 218,212	5,340 121	3,314 128
eylon hina	53 304	36,340 174,132	38 415	53,580 369 412	5 31	7,350 43,377	96	97,270	457	525,419	415	433
lava and Madura	1,038	400,195	267	242,906	24	40,944	1,329	586,921 684,045	1,566 5,871	1,461,467 2,705,870	5,310	764 2,580
Outch East Indies, Other	152 29	84,526 15,475	53	45,453 5,710	3	5,420	208	135,399 21,185	360 219	275,181	316 33	266
lawaii	159	94,726	199	250,605	57		415	511,407	547	98,627 666,095	668	16 836
long Kong.	76 57	50,108 29,084	80 135	46,313 77,585	6	20,089 4,985	162 193	116,510 111,654	123	94,800 Included in	Arabia 97	81
apan	1,439	794,886 98,956	824 52	616,346	41	64,869	2,304	1,476,101	3,477	2,226,265	2,024	1,728
Cwantung	132	91,643	198	59,834 169,97€		3,939 16,773	161 345	162,729 278,392	251 816	245,421 671,308	82 565	80
Persia. Pailippine Islands	1,135	6,567 651,671	866 866	49,967 592,570	13	21,192	69	77,726	851	519,604	441	547 322
Siam	77	50,872	16	9,788			93	1,317,381 60,660	3,532 196	2,273,897 156,997	2,153 143	1,370
Soviet Russia in Asia	10 221	8,000 148,959	63 140	67,306 175,354	30			135,145 334,049		36,354 Included in	10	6
Turkey in Asia	187	115,655	1,367	499,251	3	2,324	1,557	617,230	1,367	771,066	733	395
Other Asia Oceania				·/*********								******
Australia	2,923	1,507,798	3,925	1,537,091	98	144,039	6,943	3,188,928	27,198	12,397,683	17,305	8,359
British Oceania	5	3,220 357	2	2,337 1,084	1	988	8 2	6,545 1,441	1 23	15,058	32	20
New Zealand	469	280,911	340	382,459		113,482		776,852	3,134	8,010 1,974,637	2,306	
Africa												
Ethiopia	59	26,884	12	6,980 20,929		2,77	12 79		247	153,109		
British East Africa	246	191,439	94	98,409	oil a	4! 4.26	344	294.110	315	274,345	486	445
Belgian Congo British East Africa Union of South Africa British South Africa, Other	468 11	312,195 6,371	20	570,974 16,477	168	330,231	1,561	1,213,407 24,938		2,840,179	4,475	2,904
Gold Coast	30 74	12,016 24,137	173	16,477 178,357 172,348			203	190,373				
Nigeria. British West Africa	9	4,435	6	2,878	3		232	7,313	99	77,279	1,362	1,32
Egypt	234	115,526	11	193,916	18	8 22,11	677	331,552	2,088	942,698		572
Algeria and Tunisia	12	8,045	8	9,599			. 20		96	76,568	43	1
Madagascar French Africa, Other	60	30,183	101	1,100 69,573		23,66	6 178	1,100				
Italian Africa		300	1 21	9,568	5	20,00	21	9,56				
Liberia	82	38,564	71		5	8 10,93	2 161	94,86	860		747	
Mozambique. Pertuguese Africa, Other		12,691	18	27,18	1 1	6 67,78	3 54	107,65	134	138,780	158	3 11
Canary Islands.	72	45,579	83	70,86	4	4 3,75	1 159		217 187	119,570	122	9:
Canary Islands. Spanish Africa, Other	29	16,952	17	10,99	4	9,47	8 48	37,42	27		28	3 2
Other Countries		**********							774	366,945	308	18
	11		11		11		11		11	000,02	11 000	10

Department of Commerce, Automotive Division.

U.S. EXPORTS OF PARTS AND ACCESSORIES



COUNTRIES	Parts for Assembly	Parts for Re- placement	Auto Acces- sories	Service Equip- ment	Service Equip- ment	Shock Ab- sorbers	Springs, Auto and Truck	Gasoline and Oil Pumps	Spark Plugs	Storage	Batteries	Starting, Lighting and Ignition	Asbestos Linin	
	Value	Value	Value	Value	Value	Value	Value	Value	Value	No.	Value	Value	Feet	Value
ustria. zores and Madeira Is.	\$46,414	\$202,309	\$7,477	\$5,589	\$77	\$96	\$331	\$1,614		57	\$819		21,557	\$6,0
elgium and Luxemburg	3,740,703	12,327 2,206,967	1,044 73,300	34,465	5,839	78	1,965	205 $21,282$	\$31,075	132 705	720 6,998	\$48 718	490 65,466	11,1
algaria		5,763	508		215		611	3,960	860	4	24		9,104	1,8
echoslovakiaenmark	2,072 3,338,968	119,485 1,407,568	6,635 71,112	8,144 30,963	1,894 2,890	114	1,053 1,774	347 1,510	7,678	10 205	418	64	4,045	9
thonia		22,645	338	344	1,218		1,112	313	20,666	10,395	56,730 922	2,017	158,626 749	35,9
nlandance	102,132 5,244,073	184,042 1,295,575	12,000 41,072	6,592	3,652	621	841	731	7,425	2,103	16,225	88	93,653	24,0
ermany	3,624,950	1,474,052	78,782	159,594 83,960	17,533 9,545	12,494 10,269	6,051	24,871 81,378	634,989 145,276	550 114	4,223 1,163	4,663 4,794	122,024 102,456	20,8
ibraltar		532	96				******		268		*******		51	20,2
ungary	4,337 729	190,892 77,045	9,062 1,822	2,667 1,941	1,208 2,527	25	17,595 273	1,099 145	4,529 1,459	1,463	10,093 181	65	41,765 37,545	13,8
eland.	339	25,481	4,557	1,104	105		7,725		6	190	1,389		2.914	7,
ish Free State	165,638 216,693	37,963 168,630	722 56,810	47,297 69,733	405 2,803	61,532	502 966	1,515 133,845	100 640	30	75	49	467	
tvin.	30	38,672	1,120	198	905	25,200	800	315	106,640	116 46	995 398		285,930 412	33,0
thuania. alta, Gozo and Cyprus		11,035 29,335	317 2,107	51	777		1,110	159	5,114	6	63		1,215	
etherlands	391,779	630,840	39,797	72,278	311 612	493	795 6,188	20,878	21,377	3,862	1,668 25,158	2,956	1,014 82,252	14.
DEWAY	35,026	188,388	14,457	13,967	3,019	574	839	10,405	13,775	3,992	28,733	966	53,677	13,
oland and Danzig	29,102 1,119	243,997 176,378	16,708 8,743	5,288 10,136	2,564 3,667	2,820 390	130 3,066	16,000 1,148	7,060 6,201	1,372	524 10,755	360	20,652 7,484	3,
oumania	71	204,676	2,917	5,048	73	1,033	8,926	8,737	2,941	426	3,259	58	49,424	12,
oviet Russia	2,038,544 2,680,179	1,287,033 892,834	91,796 100,485	486,913 28,919	26,236 6,988		2,882	832 2,296	27,623	526	3,689	271,834	Acres .	
weden	182,843	1,059,299	91,129	43,672	10,206		395	2,548	63,442 33,536	4,256 4,231	33,613 27,523	410 892	39,166 198 516	10, 43,
witzerland. urkey (in Europe).	10,854	151,963	14,863	21,018	1,451	1,551	265	1,191	26,157	2,215	18,640		21,806	4,
ni.ed Kingdom.	6,379,407	3,064,428	174,720	416,146	88,945	35,355	6,175	739,599	8,576	89	899	17,279	24,149	6.
igoslavia and Albania	16		1,569	906			3,230	3,835	5,302	105	869		27,060	5,
niled States	17,154,802	6,582,725	1,951,380	394,318	118,337	253,476	70,449	210,949	200,999	8,298	52,136	700 400	****	
ritish Honduras	170	5,770	372	124	218		86	642	162	57	470		956,654 516	179,
esta Ricauatemala	116,308 180	14,198 54,285	2,717 10,028	1,769	141 465	350 2,548	24,202 29,393	334 1,312	934 1,064	395	o,490	226	6.57	1,
onduras	3,313	30,711	9,255	1,090	1,109	25	1,454	488	1,558	1,081 236	9,122 1,942	2,263 1,958	16,884 2,506	4,
icaragua	6,360 270,308	21,735 111,598	4,042 13,642	16 506			1,268	1,555	535	270	2,067	505	1,470	
alvador	6,941	38,354	11,261	16,596 1,903	182	64	3,089 1,083	6,177 253	10,848 1,018	2,510 280	20,335 2,758	2,975 228	17,207 7,250	4,
lexico. ewfoundland	2,064,385		126,517	81,172	29,456	1,098	9,050	66,682	31,415	3,299	22,966	24,429	217,664	48,
arbados	5,852 653	37,909 26,112	8,487 842	1,221 905	287 57		779 439	2,648 215	93 191	621 300	5,074 2,312	647	2,517	
imaica	3,717	140,776	7,637	5,215	619	229	6,361	13,649	583	1.911	14,032	147 399	10,100	2.
rinidad	3,888 2,279	86,255 50,727	2,191 2,369	6,596 4,514	928 136		1,300 171	1,891 2,633	132	1,252	8,910	820	9.017	2,
uba	221,919	520,619	31.256	22.043	5.349		40.790	21,725	669 17,438	538 8,500	5,406	892 14,930	6,547 159,826	1, 45,
ominican Republicutch West Indies	4,751 12,381	50,690 81,431	5,066 7,384	2,763 7,825	253		2,161	3,574	417	438	2,829	449	5,05	1,
rench West Indies.	1,061	86,763	1,147	722	1,015		4,531 397	2,146 239	713 99	546 336	4,535 2,146	1,906 3,389	3,420	
laitian Republic	315	52,825	6,200	3,765	363	36	988	3,900	332	162	1,221	274	5,942	1,
irgin Islands. rgentina. olivia	5,712,153	5,586 3,240,241	366,195	219,766	47,060	19,812	878 11,160	216 57,614	63,327	103 43,156	988 289,737		207 545,764	101
olivia	1,192	41,595	5,300	964	1,977		704	269	497	240	1.867	13,894 535	3,071	121.
razilhile	729,776 1,172,044	859,709 758,420		152,308 78,957	7 493 20.528		31,016 83,056	204,188 65,016	8,689	6,239	37,977		556,526	107,
olombia	10.160	246,671	24,783	8,997	3,809	807	21,808	11,080	11,243 6,479	6,513 2,827	45,294 23,869		152,979 43,767	32, 11,
cuador	4,480	26,540 8,119	3,814 1,171	1,604 904	1,650		1,931	2,662	784	412	3,774		12.534	3,
ritish Guiana	100	3,641	3,790	44	2,523	326	402	1,056 288	255 155	114 89	794 689		2,381 456	
rench Guiana	386	5,885	69		404					4	22	355		
eru	1,335			909 11,054			1,443 8,529	3,432	149 5,367	1,558	3,089 15,913		2,033 23,992	5.
ruguay.	382,380	334,711	56,308	50,576	3,441	566	4,856	27,201	5,299	8,213	55,470	1,196	69,833	15,
enezuela den.	451,365	429,756 6,196	95,792 701	22,582			17,057 386	12,848 819	12,413	3,692 129	27,614 1,123	11,796	49,961 £12	14,
ritish India	13,720	1,404,377	74,869	39,398	15,032	58	42,183	32,833	4,023	24,932	172,114	17,463	190,737	36,
ritish Malayaeylon	664 180				2,443 172		11,060	8,242 3,890	347	6,371	43,567	8,244	129,636	17,
hina	80,339	396,786	31,571	8,186	1,321			39,449	15,483	6,907	10,458 45,626	2,216 20,072	13,730 118,214	20
ava and Madura	5,004 1,020	695,112 196,203					20,803	30,917	19,403	8,944	57,049	5,402	132.638	21
Other Dutch East Indies rench Inde China	381	6,273	2,266	1.630)		9,608	2.018		3,856 489	20,520 3,398	1,100	66,760 2,700	9,
longkong	4,297	104,227	10.062	5.296	1,800	3	8,279	7,323	3,173	2,105	14,727	816	38,503	9,
apan	2,456,928	1,307,647	72,771	1,134 36,031	8,565		14,086 22,370	22,752	11.891	2.028	3,308 14,267	164,003	404 653,782	137
wantung		45,517	4,995	302	256		1,444	505	1,714	984	6,191	909	3,189	201
alestine	1,214		1,394 2,677	1,064			298 13,937	5.834	1,451	430	3,444 2,701	65	708 985	
hilippine Islands	8,059	733,940	53,840	24,901	5,799	428	26,524	31,848	16,967	7,093	51,319	9,216	100,951	28
jam. yria.	14,306		10,533 3,263		174		11,119 3,602		12,410 3,384		13,848 8,259	1,317	6,187	1
urkey (in Asia)	984,428	231,398	3,035	11,628	759	77	7.779	2.405	2,665	458	2,793	876	42,879 9,736	1
ustralia	661,564	1,826,657	138.538	73.612	50,593		1,405	16,136	504	772	4,794	9,532	436,306	86
ritish Oceania	1,644 2,201	3,862	2,186	22	1		393 168	115	. 266	231 592	1,784	61 356	2,870 326	
lew Zealand	153,117	830,083	186,760	69,209	6,829		7,537	24,542	3,318	9.882	71,733	2,604	165,415	
elgian Congoritish East Africa	22,521 12,496	81,524 271,876	2,063 21,784	1,235	75	46	1,264 13,610			188 2,539			35,490	5
nion of South Africa	32,396	1,297,416	110,638	107,781	5,92	3,249	40,029	43,049	6,071	28,573	202.279	3,621	135,942	24
ritish West Africa	114,330	298,118 7,695	7,119	1,848	36	5	8,630 869	484	2,342	787 191	7,530 1,955	2,453	17,474 963	6
anary Islands	146	35,089	9,178	162	3,830	0	1,407	122	1,168	794	5.75	1	6,121	1
gypt		412,657	7,759	6,050	2,30	6	8,394	673	6,190	3,718	26,00	283	21,386	5
rench Africa	32,012	3,808	62	29,400		9 69		76,611	265	339	2,61		161 41	
iberia Aadagascar Aorocco	344	8,609	245					11		20	14	7 196		
Agrambians	6,540			6,167			1,086	1,510	5,797	140		8 382 7 130	1,540 4,080	
Aozambique Other Portuguese Africa	5,00	62,169	5,836	813			3,677	18	237	170	12,80	304	4,721	2
panish Africa	570	23,495	1,185				1,300		1,510		********	259	240	-
Other Countries	2,75				8	1 19	6,463	472	500	565	4,44	1,697	1,711	
ławaii	27,083 14,939			35,828		0 1,234				17,578				
orto Rico		217,599	22,399	24,798	2,17	4 58	14,868	46,29	5,118	3,252	23,04	2 4,716	63,354	15

1930-Mergers, Acquisitions and

Bendix Aviation Corp. acquired Hydraulic Brake Associates, Ltd., March 20.

Bendix Aviation Corp. purchased Bragg-Kliesrath Corp. Feb. 10.

Bendix Aviation Corp. takes over assets Consolidated Instrument Co., July 14.

Bendix-Stromberg Carburetor Co. is the new name of Stromberg Motor Devices Co., May 1.

Borg-Warner Corp., Chicago, acquired Chicago Rolling Mills Co., West Pullman, Ill., Feb. 17.

Brunner-Winkle Aircraft Corp. changes name to Bird Aircraft Corp., Sept. 9 (reorganization).

Briggs & Stratton Corp., Milwaukee, acquired I. X. L. Metal Spring Cover Co., March 10. Chausson-Gullay-Moreux, French radiator manufacturers,

merge commercial interests, Dec. 16. Checker Cab Co. buys Parmelee Transportation Co., N. Y.,

Sept. 10.

Chevrolet Aircraft Corp. became affiliated with Glenn L. Martin Aircraft Corp., Baltimore, Jan. 12.

Cochise Rock Drill Mfg. Co., Los Angeles, Calif., purchased by Independent Pneumatic Tool Co., June 23.

Cooper-Hewitt Electric Co., New York, changed name to General Electric Vapor Lamp Co., Jan. 1.

Corbitt Co., new name of Corbitt Truck Co. of North Carolina, Jan. 12.

Cord Corp. buys L.G.S. Mfg. Co. (Indianapolis), Sept. 25. Curtiss-Wright Export Corp., new name of Curtiss Aeroplane Export Corp., Jan. 12.

Cutler-Hammer, Inc., buys Regnolite, div. of Reynolds Spring Co., Aug. 4.

Dayton Aircraft Engine Co. merged with Pheasant Aircraft Corp., Aug. 16.

R. G. Dun Corp. merges National Credit Office-R. G. Dun & Co., Dec. 11.

DiVco-Detroit Corp. buys Step-N-Drive Corp., Buffalo, Sept. 18.

Drawn Steel Tube Co. (new) takes over defunct Appleton Steel Tube Co., Appleton, Wis., July 1.

Duckworth Chain & Mfg. Co., Springfield, Mass., merged with Baldwin Chain & Mfg. Co., March 4.

du Pont Motors, Inc., Wilmington, Del., acquired Indian Motocycle Co., Springfield, Mass., May 22. Eaton Axle & Spring Co., Cleveland, and Wilcox Rich

Corp., Detroit, merged April 2. Electric Auto-Lite Co., Toledo, acquired Brown Mfg. Co. (lamps), Columbus, Ohio, Jan. 10.

Ex-Cell-O Aircraft & Tool Corp., Detroit, acquired Airports & Tool Corp., Detroit, Feb. 24.

Ex-Cell-O Aircraft & Tool Corp. acquired Continental Tool Works, May 5.

Faith Mfg. Co. succeeds Kingsley-Miller Co., Chicago, Nov. 17.

Farm Tools, Inc. (new), combines Vulcan Plow Co., Roderich Lean Co., Ohio; Roderich Lean Co., Indiana; Hayes Pump & Planter Co., Peoria Drill & Seeder Co., Aug. 4.

Ford Motor Co. purchased United States Pressed Steel, Ypsilanti, Mich., Feb. 24.

General Auto Devices Co., Chicago, sold to Krone-Sebek Die Casting & Mfg. Co., Chicago, Sept. 4.

General Aviation Corp. is new name of Fokker Aircraft Co. of America, June 18.

General Motors Corp. purchased Winton Engine Co., Cleveland, May 15.

General Motors Corp. purchases Electro-Motive Co., Cleveland, Nov. 10.

B. F. Goodrich Co., Akron, acquired Miller Rubber Co., Feb. 17.

Corporations Organ

Acme Motor Truck Corp. organized by Acme Motor Truck Co., Detroit, Feb. 5.

Aeromotive Engineering Co., Chicago, organized Aug. 4. Alloys Foundry Corp. formed at West Paterson, N. J., March 4.

American Agricultural Implement Co., Chicago, chartered Aug. 4.

Appleton Steel Tubes Co., Appleton, Wis., dissolved April

Associated Alloy Steel Co., Inc., Cleveland, formed by Timken Roller Bearing Co., Sharon Steel Hoop Co., and Ludlum Steel Co., Feb. 11.

Aztec Export Corp. formed (subsidiary of Asbestos Textile Co.) Aug. 18.

Bendix-Westinghouse Automotive Air Brake Co. formed by Bendix Aviation Corp. and Westinghouse Air Brake Co., Feb. 27.

Birmingham Rubber Products Co. reorganized by Birmingham Tire & Rubber Co. stockholders, Jan.

Borg-Warner Service Parts Co., Chicago, formed by Borg-

Brooks Steam Motors, Ltd., Stratford, Ont., liquidated upon court order, June 9. Chrysler Corp. forms Amplex Mfg. Co., Sept. 11.

Warner Corp., Feb. 10.

De Vaux-Hall Motors, Inc., Dec. 15, replaces Durant Motors of California. Norman De Vaux, president. Essex Wire Corp., Detroit, formed Feb. 8. A. E. Holton,

president.

Fawick Mfg. Co. formed by Waukesha Motors Interests. Thos. F. Fawick, president, Milwaukee, Nov. 3.

General Motors Acceptance Corp. of South America,

formed by G.M.A.C., Jan. 6.

General Motors Corp. formed G.M. Management Corp.

March 5, to replace Managers Securities Co., formed in 1923.

Gilbert & Barker Mfg. Co. of Canada, Ltd., London, Ont., formed by Gilbert & Barker Mfg. Co., Springfield, Mass.

Globe Stainless Tube Co. formed subsidiary of Globe Steel Tube Co., Milwaukee, Dec. 23.

Goodyear Tire & Rubber Co. of Argentina, Inc., Buenos Aires, formed by Goodyear Tire & Rubber Co., Akron, May 6.

Guthier Airplane Co., Chicago, formed Sept. 2. John Cordon, R. E. Guthier, G. J. Schafer, incorporators.

Heinen Air Yacht Corp. formed April 26. Capt. Anton F.

Heinen, president.

Highway Transport Corp. formed by General Motors
Truck Corp., Jan. 8.

Changes in Corporate Names

Hein-Werner Mfg. Co. buys Mueller Engineering Works, Waukesha, Wis., Nov. 17.

Houdaille-Hershey Corp. acquired Schwitzer-Cummins Co., Indianapolis, Jan. 10.

Houdaille-Hershey Corp. acquired Lyon Tire Cover Co., May 12.

Hydraulic Hoist Mfg. Co., St. Paul, acquired by Wood Hydraulic Hoist & Body Co., Detroit, Jan.

Ingersoll Steel & Disc Co., new name of Galesburg Coulter-Disc Co., subsidiary of Borg-Warner Corp., Feb. 27.

S. L. Jackson, Lima, Ohio, acquired Fremont Auto Fabrics

Co., Jan. 1.

Kari-Keen Mfg. Co., Sioux City, Iowa, acquired Irving Mfg. Co., Buffalo, N. Y.

Kelsey-Hayes Wheel Corp. purchased Jaxon Steel Products Co. from General Motors Corp., June 23.

Lamson-Sessions Co., Cleveland, acquired Foster Bolt & Nut Mfg. Co., Cleveland and Chicago, Feb. 4.

Lever Motors Corp. formed by Elcar Motor Co., Elkhart, Ind., and Lever Motors Corp. of Indiana, July 10.

Libbey-Owens Co. and Edward Ford Co., both of Toledo, merged May 19.

Mansfield Tire & Rubber Co., Mansfield, Ohio, buys Century Tire Co., Chicago, July 29.

Milwaukee Stamping Co., Milwaukee, acquired Litterer Bros. Mfg. Co., Chicago, Jan. 1.

Moon Motor Car Co. and Gardner Motor Car Co., both of St. Louis, consolidated sales and engineering staffs, April 2.

Moon Motor Car Co., St. Louis, and Kissel Motor Car Co., Hartford, Wis., merger by New Era Motors, Inc., May 8.

Motor Wheel Corp., Lansing, acquired Earle K. Baker interest, Baker Wheel & Rim Co., and Universal Rim Co., May 20.

Muskegon Motor Specialties Co. acquired Jackson Motor Shaft Co., May.

N. A. T. buys Stout Air Lines (Cleveland to Detroit), Sept. 13.

New Way Motor Co., Lansing, formed in 1905, dissolved March 11. J. W. Wilford, receiver.

Noonan-Malstrom Co. purchases Monighan Foundry Co., Chicago, Nov. 3. Monighan becomes division of Noonan.

North American Aviation, Inc., acquired Ford Instrument Co., Long Island City, Feb. 18.

Peerless Motor Car Corp. and Bucciali Freres enter reciprocal manufacturing and merchandising arrangements, April 6.

Schultz Die Casting Co. (new), purchases Toledo Tap Co., July 2.

Spicer Mfg. Corp., Toledo, buys Superior Universal Products Co., Bowling Green, Ohio, July 1.

Transitone Radio Corp., Philadelphia Storage Battery Co., entered manufacturing-sales agreement, June 30.

Van Sicklen Corp., New York (subsidiary of Allied Motor Industries, Inc.), acquired Lorraine Corp., Jan. 1.

Vogt Mfg, Co., Rochester, acquired Waterloo Textile Corp., Jan. 27.

Joseph Weidenhoff, Inc., buys Apollo Motor Gauge Co., Chicago, Nov. 19.

Wisconsin Aircraft Co. sold Dec. 15 (Chippewa Falls, Wis.) to Dayton Kirby and Norman Deuel.

York-Hoover Body Corp., York, Pa., acquired York Knit-ting Mills Co., Jan. 5.

ized and Dissolved-1930

Issoudun Aircraft Co. formed March 29. Major T. G. Lanphier, president, March 28.

Lawrance Engineering and Research Corp. formed by Charles L. Lawrance, N. Y., Sept. 24.

Master Tire & Rubber Co., Akron, organized April 29. Michigan Steel Tube Products Co. forms Miller-Shelby Products Division (Shelby, Ohio), Dec. 22.

Michelin Tire Co. (U.S.) Milltown, N. J., plant permanently ceased operating Sept. 15.

Nash-Ohio Engine Co., Alliance, Ohio, incorporated Jan. 20 (Diesel engines).

National Boat Builders, Registered, formed as division of National Steel Car Corp., Hamilton, Ont., Nov. 11.

New Way Motor Co., Lansing, dissolved May 5.

Packard Cable Co. formed as subsidiary of Packard Electric Co., Toronto, Dec. 6.

Powercraft Motors Co. replaces Wright-Tuttle Aircraft Co., Anderson, Ind., Oct. 20, reorganization.

Republic Research Corp. formed by Republic Steel Co., Massillon, Ohio, April 21.

S. P. A. Truck Corp. formed by Studebaker Corp., June 30. Second Managers Securities Corp. formed by General Motors Corp., Jan. 20.

Sheffield Steel Corp. (assigned to American Rolling Mills Co.), June 30.

Snap-On Tools, Inc., reincorporated to hold Snap-On Wrench Co., Sept. 22, Kenosha.

Societe Bendix, Paris, formed as French unit of Bendix Aviation Corp., May 1.

Sparton of Canada, Ltd., London, Ont., formed by Sparks Withington Co., Jackson, Mich., Jan. 30.

Stanley Steam Motors Corp., Del., charter, Dec. 4.

F. B. Stearns Co., Cleveland (formed in 1898), dissolved Jan. 1.

Stoll Mfg. Co., Inc., replaces Stoll Mfg. Co., in reorganization Nov. 17, La Crosse, Wis.

Stromberg Motoscope Corp., Chicago, incorporated April 26 by E. A. Stromberg and associates.

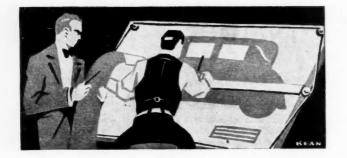
Syracuse Perfection Castings, Inc., sold at auction Aug. 26. Troy Trailer & Wagon Co., sold at auction Nov. 17, Troy, Ohio.

Tyson Roller Bearing Co. formed in Massillon, Ohio, by Frank Tyson.

Visco-Meter Corp., Buffalo, formed by A. B. Schultz and William Clare (formerly of Houde), Jan. 1.

Wayne Chemical Co., Detroit, new name of Wayne Soap Co., Jan. 1.

Wisconsin Aluminum Foundry Co., Inc., replaces Wisconsin Aluminum Foundry, reorganization, Manitowoc, Wis., Oct. 28.



SPECIFI

AMERICAN PASSENGER

	GEN	ERAI			(CLUTO	CH				GEAR!	SET						REAR	AXLE			
							Fa	cings												1		
MAKE AND MODEL	Wheelbare (Ins.)	Chassis Weight (Lbs.)	Tire Size	Make and Model	Type	Number of Driving and Driven Disks	Maximum Dia. (Ins.)	Minimum Dia. (Ins.)	Number	Make	Location	Number of Forward Speeds	Low Gear Ratio	Universals Type and Make	Make	Туре	Final Drive	Gear Ratio	Propulsion Taken By	Torque Taken By	Minimum Road Clearance (Ins.)	Differential Make
uburn8-98	127 75		5.50/17 3.75/18	Long9ABM	SP.	1-1	10 8 7 8 7	5½ 6½	2	Det W-G	Eng		2.873	m-V-P mf-Spi	Col	1/2F 1/2F	SB	4.45°.	Spr	Spr	91/4	N-P
uick 8-50 uick 8-60 uick 8-80 uick 8-90	114 118 124 132	2870 3275	5.25/18 5.50/19 6.50/19 6.50/19	Own Own Own	SP. SP. dp. dp.	1-1 1-1 3-2 3-2	9½ 9% 9 9	$6\frac{1}{4}$ $6\frac{1}{4}$ $6\frac{1}{2}$ $6\frac{1}{2}$	2 2 4 4	Own Own Own	Eng Eng Eng Eng	3	3.00 3.03 3.149 3.149	m-Own. m-Own. m-Own. m-Own.	Own Own Own	1/2F 8/4F 8/4F 8/4F	SB	4.54 4.18° 4.27 4.36°	TT TT TT	TT	8 85% 85% 85%	BLC. BLC. BLC.
adillac 355 adillac 370 adillac 452 hevrolet. hrysler Six hrysler 70 hrysler Eight hrysler Imperial 8 ord L-29 cunningham V-9	134 140-143 148 109 116 182‡ 186 4‡ 211‡ 137*/2 132-142		6.50/19 7.00/19 7.50/19 4.75/19 5.25/19 5.50/18 7.00/18 7.00/18 7.00/20	Own. Own. Own. Own. Own. Own. Own.	dp. dp. sP. sP. sP. sP. sP. sP.	3-2 3-2 1-1	10 10 10 9 97/8 10 97/8 111/16 87/8 81/2	7 7 7 614 634 614 618 618 656	4 4 4 2 2 2 2 2 2 14	Own Own Own Own Own	Eng. Eng. Eng. Eng. Eng. Eng. Eng. Eng.	3 3 4 4 4 3 3	2.5 2.5 2.5 2.75 3.627 3.11 3.39	m-Spi. m-Spi. m-Spi. m-Own. m m m m m m	Own. Own. Own. Own.	\$4F. \$4F. \$4F. 1/2F. 1/2F. 1/2F. 1/2F. 1/2F. 1/2F.	SB. SB. SB. SB. SB. I-Hyp	4.54 4.54° 4.39° 3.82° 4.1 3.81° 4.41° 4.25°	TT. TT. Spr. Spr. Spr. Spr. Spr. Spr. Spr. Spr	TT. TT. TT. Spr. Spr. Spr. Spr. Spr. Spr. Spr. Spr	8 1/6 8 3/8 8 3/8 8 5/6 8 5/6 8 5/6 8 5/6 8 8	BLC BLC BLC Own Own Tim.
De Soto Six. SA De Soto Eight CF DeVaux Six Dodge Six Dodge 6 Dodge 8 Dodge Eight Duesenberg J UPont G Durant 6-17	114 169¾ 176⅓ 118 142–153½		5.00/19 5.25/19 5.00/19 5.00/19 5.00/19 5.50/18 7.00/19 7.00/20 5.00/19 5.50/19	Own. Own. Own. Own. Own. Own. Own. Own.	SP. SP. SP. SP. SP. dp. dp. SP. SP.	-1 3-2 3-2 3-2 2-1	87/8 97/8 87/8 87/8 87/8 97/8 11 83/4 87/8 97/8	61/8 63/4 61/8 61/8 63/4 63/4 61/8 63/4	2 2 2 2 2 2 4 4 4 4 2	War Own Own Own Own Own W-G Own	Eng. Eng. Eng. Eng. Eng. Eng. Eng. Eng.	3 3 3 3 3 3 4	2.75 2.75 2.75 2.75 2.48 3.32 3.74	m-Spi m- m- m-Spi m-Spi m-Spi m-Spi	Ada. Own Own Own Own Col. Own	12F. 12F. 12F. 12F. 12F. 12F. 12F. 12F.	SB SB SB SB SB SB SB SB SB SB	4.9 4.6 4.6	Spr. Spr. Spr. Spr. Spr. Spr. Spr. Spr.	Spr. Spr. Spr. Spr. Spr. Spr. Spr. Spr.	81/4	Own
ssex Super 6	113		5.00/19	Own	SP.		No	No.	No	Own.	Eng.	. 3		m-Spi.	Own.	1/2F.	. SB	5.4°.	Spr.	Spr		Own
ord A ranklin 15 Trans. ranklin 15 DeLuxe	103½ 125–132 132		4.75/19 4.75/19 6.50/19	Own B-L. B-L.	SP.	. 1-1	9 117/8 117/8		2 2 2	Own. W-G. W-G.	Eng. Eng. Eng.	3 4 4	}	m-Own m-Spi m-Spi	Own. Own. Own.	34F 12F 12F	SB SB	3.77. 4.54° 4.73°	1.	Spr	83/4 83/4	Owi Owi Owi
Gardner. 136 Gardner. 148 Gardner. 158 Graham. Std. 6 Graham. Spec. 6 Graham. Spec. 8-20 Graham. Cus. 8-34	125 130 115 115 120		5.50/19 5.50/19 6.50/18 5.50/18 5.50/18 6.00/17 6.50/18	Long Long	SP SP SP	2-1 2-1 -1 -1 -1	87/8 87/8 97/8 91/4 91/4 93/4 11	61/8 63/4 51/2 51/6	2 2	W-G. W-G. W-G. W-G. W-G. W-G.	Eng. Eng. Eng. Eng. Eng. Eng.	4	3.03 3.54 3.54	m-Spi. m-Spi. m-Spi. m m m	Col	1/2F. 1/2F. 1/2F. 1/2F. 1/2F. 1/2F.	SB SB SB SB SB SB	4.45 4.45° 4.3	Spr Spr Spr Spr Spr Spr	Spr Spr	8 85/8 85/8	N-P N-P N-P
Hudson Great 8 Hupmobile S Hupmobile I Hupmobile (Hupmobile H, U	113½ 118 121	26	5.50/18 5.50/19 5.50/19 6.00/19 6.50/19	B&B9 B&B 10A Long9AB	-i SP M SP	2-1 2-1 2-1	No 87/8 97/1 10 93/4	634	2 2	Own W-G W-G W-G	Eng. Eng. Eng. Eng.	3	2.86 2.87 2.87	m-Spi. m-Mec m-U-P m-U-P m-U-P	Own Sal Sal Own Own	1/2F.	SB SB SB SB SB	4.64° 4.70° 4.55 4.55 4.08°	Spr.	Spr. Spr. Spr. Spr. Spr. Spr.	81% 87% 87%	Own Sal. Sal. BL
Jordan		1.4 4	5.50/18 6.00/18		B SF	2-1 2-1	93,	51/		W-G. W-G	Eng.			m-Cle.		12F.	SB	4.9	Spr.	Spr	. 8	N-1 N-1
LaSalle34			6.50/19		dp			7	4 12	Own Own	Eng.			m-Spi. m-Spi.	Own Tim.		SB	. 4.91	TT.	TT.	733	BL
Marmon Roosevelt. Marmon Eight 6 Marmon Eight 7 Marmon Big Eight. Marmon	1721 1801 1911 2021 11234 8 130–136		6.50/19 5.50/19 6.50/19	Roc. 10I Roc. 11I Roc. 11I	L SI L SI L SI SI SI	2 1-1 2 1-1 2 1-1 2 1-1 2 1-1	87 97 11	8 57 8 67 57 57 8 67	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	W-G W-G Det. W-G	Eng. Eng.		3 3.04 3 3.07 3 3.11 3 4.01 3 3.04 3 2.83	m-Spi. m-Spi. m-Spi. m-Spi. m	Sal Sal Sal Sal	1/2F. 1/2F. 1/2F. 1/2F. 1/2F.	SB	. 1	Spr.		8½ 8½ 8½ 9 9 8½ 9	Sal
Nash 6-6 Nash 8-7 Nash 8-8 Nash 8-9	0 11614	193 240	5.00/19 5.25/19 5.50/19 6.50/19	B&B1 B&B. 10.	0" SI	2-1 2-1 2-1	919	8 61 6 63 8 63 8 63	8 2 2 2 2 2 4 2 2	Own Own	Eng.		3 3.06 3 3.06 3 3.08 3 3.22	mf-Ow mf-Ow	n. Own n. Own n. Own n. Own	1/2F. 1/2F.	SB SB SB	5.1 5.1 4.45 4.5	Spr	Spr	81/4 81/2 81/4 81/4	Ow Ow Ow
OaklandF-3		1	5.50/1			P. 2-1					1		3 3.0		Own					1	8	Ov
Packard 826, 83 Packard 840, 84	1271-134	1	6.50/1	9 Long 9 Long	8	P. 1-2 P. 2-3	2 11 98	61 61		Own			4	m-Me	Own	1/2F.	Нур Нур	4.69	Spr.	Spr.	83 739	

CATIONS



CAR CHASSIS

	В	RAKE	S		1	FRO	NT	AX	LE		STE	ERING	GEAF	1		SPRI	NGS		SHACK	als	FRA	ME	CHAS		RIM	IS	WHI	EELS	
E	Foot		Ha	nd ,		be.								(Ft.)	F	rent	1	Rear					CATIO	ON					MAKE AND
Type and Location	Braking Area (Sq. Ins.)	Application	Type and Location	Braking Area (Sq. Ins.)	Make	Axle Section Ty	Camber (°)		Castor (°)	Axle End Type	Make	Туре	Ratio (te ene)	Minimum Turni Circle Diameter	Туре	Length and Width (Ins.)	Type	Length and Width (Ins.)	Make	Type	Material	Make	Make	Туре	Diameter and Width (Ins.)	Make	Туре	Make	MODEL
F	236¼ 54		IF	236 ¹ ⁄ ₄ 54	Col	I.	2					C&L W&W.	18.2		1/2E. T1/2.	37x2	1/2E. 1/4E.	563/4x2	Own.	M.	1020			CR. PG.	17x4		W D	Day°	Auburn8-98 Austin
F	182 155 189 189	DM	IF IF IF	182 155% 189 189	Owi Owi Owi	n. I.	1 2 2 2	3/4	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	RE RE RE	Sag	W&S W&R. W&R. W&R.	16 17 20 20	39½ 42¾	½E.	35x2 36 ⁷ / ₈ x2 37 ⁵ / ₈ x2 37 ⁵ / ₈ x2	1/2E. 1/2E. 1/2E.	54½x2 54¼x2½ 58¾x2½ 58¾x2½	Try Own. Own. Own.	M.M.	St St St	Smi.	Zerk Zerk	PG.		Jax Jax	A	Jax Jax Jax Jax	Buick . 8-50 Buick . 8-60 Buick . 8-80 Buick . 8-90
	173 173 216 114 143 ⁷ / ₈ 189 ⁵ / ₈ 197 348	DM. MVS MVS DM. DH. DH. DH. DH. DH.	IR. IR. IR. ET. ET. ET. ET. IR.	863 1067 429 4914 98 348	Ow	n. P. n. I. n. I. I. I.	2 2 0	1/2 1/2 1/2	3 2½ 1½ 1½ 1½ 1½	RE RE EL EL EL	Sag. Sag. Own. Ross. Gem.	W&S W&S W&S W&S C&L W&R C&L	17 17 17 17 15.5 18 18 17	5134 5328 43 43	近年 近年 近年 近年 近年 近年 近年 近年 近年 近年	39x2 40x21/4 42x21/4 36x 351/2x12 39 1/4x 39 1/4x21/2 22x21/2 40x21/4.	1/2E. 1/2E. 1/2E. 1/2E. 1/2E.	58x2 58x2½ 60x2½ 54x 53¾x1½ 57¾x 54½x2 62x2½ 62x2½ 62x2½		M.M.M.RRR	CS CS St St St St St St St	Smi.	AlAlAlZerkZerkA-ZA-ZBijur	PG. PG. PG. PG. PG. PG.	18x5 19x5 18x3 ¹ / ₄ 18x5°.	Jax Own.	A	Jax Jax Jax Own Day	Cadillac 355 Cadillac 370 Cadillac 452 Chevrolet. Chrysler Six Chrysler Fight Chrysler Leight Chrysler Imperial 8 Cord L-29 Cunningham V-9
IF IF IF IF IF IF IF IF IF	114 114 114 114 1437 144 1315 152	DH. DH. DH. DH. DH. DH. DH. DH. DH.	ET. ET. ET. ET. ET.	47	4	I	. 2	2	11/2	EL EL RE RE RE	Own. Own. Own. Ross. Ross. Own.	W&S W&S W&S W&S W&S C&L C&L W&S W&S	13 14.5 13 15.5 18 15	411/4	1/2E. 1/2E. 1/2E. 1/2E. 1/2E. 1/2E.	35\frac{1}{2}x 35\frac{1}{2}x 35\frac{3}{4}x 35\frac{3}{4}x 41x2\frac{1}{2} 40x	1/2E 1/2E 1/2E 1/2E 1/2E	545/8x 545/8x2 62x21/2 60x 55x2	Try.	M M r-II r-n M F	St. St. St. St. St. St.	Par.	Zerk	PG. PG. PG. PG. PG. PG. PG.	19x3 19x3 19x3 19x4 19x4 19x4		W	K-H. Mot K-H. STM K-H° Mot°	
IF.		DM.	-	283	4 Ou	I	-				Gem.	W&S		-	1	351/4x		545/8x 39½x	Own				Al	PG.	14,5955		A		EssexSuper 6
IF.	242	DH.	. ET	45	Ow	m. 7	r. :	- 1	1	RE	Gem.	WAS.	18		FE.	36x1%	FE.	. 42x13/4		e N	o St.	. Own	Zerk Zerk	PG.	19x4½		A	Mot.	
IF. IF. IF. IF. IF. IF.	152½ 152½ 152½ 178 264 264 308 308	DH.	ET.	36 36 49 37! 49! 49!	4	1. I		11/4 11/4 11/4 11/4	2	RE RE RE RE		C&L C&L C&L	18	43 40 40 40 41 41 45 45	1/2E 1/2E 1/2E 1/2E 1/2E	36x134 36x2 36x2 38x2 36x2 36x2 36x2 38x2	1/2E 1/2E 1/2E 1/2E 1/2E 1/2E 1/2E	. 42x1 ³ 4 2. 54x2 ¹ 4 3. 57x2 ¹ 4 57x2 ¹ 4 54x2 54x2 54x2 54x2 56x2 ¹ 4	0-N 0-N 0-N	R.R.R.R.R.R.R.R.R.R.R.R.R.R.R.R.R.R.R.	St. St. St. St.	Mic Mic Mic	Zerk. Al. Al. Al. Al. Zerk. Zerk. Zerk. Zerk.	PG. PG. PG. PG. PG. PG. PG.	18x3½ 18x3½ 18x3¼ 17x3¼ 18x4		A. A. A. A. A. A.	Mot. Bim. Bim.	Franklin 15 DeLuxe Gardner 13 Gardner 14 Gardner 15 Graham Spec. Graham Spec. Graham Cus. 8-3 Graham Cus. 8-3
IF IF IF IF	162 288 288 328 3003	DM DM DM	IF.	. 162 . 288 . 288 . 328 . 300	Ov Ov Ov Ov	vn. l		11/2 11/2 11/2 11/2	1 3 3 3 3 3	RE RE	Ross.		15 Var Var 18 20	42	1/2E 1/2E 1/2E	35¼x 36½x1¾ 37½x1 37x2 37x2	1/2I 1/2I 1/2I	54 ⁵ / ₈ x 53x1 ³ / ₄ 52 ³ / ₄ x1 54x2 57x2	Own Try. Sil Own Own	M R. N	CS. CS. CS.		Al A-Z A-Z Al Al	PG PG PG PG PG	19x4 19x4 19x4 19x4	2	A A A A	Mot.	. Hupmobile S-
IF.		DH.		49	Co Co		L				Gem.		18 18	44 44	1/2E 1/2E	37x2 55 ³ / ₄ x2	1/2H 1/2H	2. 37x2 2. 55 ³ / ₄ x2	0-N 0-N				Al	PG.	18x4 18x4	Fire. K-H		Mot.	Jordan
IF.	173		IR.			wn.	[. [.]	11/2	3		Sag.	W&S. W&R	17	483	4 1/2E 1/2E	39x2 42x	1/2I 1/2I	58x2 62x	Owi	n. M			Al	PG PG	19x5	Jax.	A. Wo	Jax . Own	LaSalle34
IF. IF. IF. IF. IF.	146 ¹ 226 ¹ 243 254 146 ³ 264 360	DM DM DM DM DM DM DM DM	IF. IF. IF. IF. IF. IF.	146 226 243 254 146 264 360	1/2 Sa 1/8 Sa Sa Sa Sa	d	I. I. I. I. I.	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	41/4 2 4 41/31/31/31/31/31/31/31/31/31/31/31/31/31	RI RI RI RI RI	Ross Ross Ross Ross Ross Ross	C&L. C&L. C&L. C&L. C&L. C&L. C&L.	16 16 16 18 18 16 18	41 41 41 48	1/2I 1/2I 1/2I 1/2I 1/2I 1/2I 1/2I	37x1 ³ / ₄ 38 ³ / ₄ x1 42x2 ¹ / ₄ 42x2 ¹ / ₄ 37x1 ³ / ₄ 42x2 ¹ / ₄ 42x2 ¹ / ₄	1/21/21/21/21/21/21/21/21/21/21/21/21/21	E. 54½x1 E. 56¾x1 E. 60x2¼ E. 60x2½ E. 54½x1 E. 60x2½ E. 60x2½	Try RSI RSI RSI RSI RSI RSI RSI RSI RSI RSI	R R R M	St. St. St. St. St. St. St. St. St.	Ow Ow Ow	n	PG PG PG PG PG	19x4 19x4 19x4 19x4 19x4 19x4 19x4 18x5	2 Cle.	A	Bim	Marmon Roosevelt Marmon Eight Marmon Eight Marmon Big Eight Marmon Marmon
IF. IF. IF.	. 214 . 214 . 214 . 245		IF. IF. IF.	214 214 214		wn. wn. wn. wn.			2 2 11 0		E Ross E Gem E Gem	C&L. C&L. W&R W&R	. 18	38 38 43 48	1/21 1/21 1/21	2. 36x2 2. 36x2 2. 38x2 2. 39 % x2	1/2 1/2 1/2	E. 507/8x2 E. 507/8x2 E. 55x2 E. 563/4x2	2 Try Try	N	I. St. I. St.	. Ow Ow . Ow	n Al n Bijur. n Bijur. n Bijur.	CR	. 18x31	Mot Mot	A A A A	. Mot	Nash 6-6 Nash 8- Nash 8-6 Nash 8-6
	. 236	DM DM	I IF.	236		wn.		1¾ 1¾	{13 21 3	4 RI	E Own E Sag.	W&S.	. 16	38	-	E. 36x2 E. 35½x2		E. 54½x: E. 54½x:	- 1		L. St		i. Zerk.		. 18x4				Oakland
												W&S.			1.2	-	1 -	1	1			1							Packard 826, 83



AMERICAN PASSENGER CAR

	GE	NERA	L		C	LUTO	H				GEAR	SET						REAR	AXLE			
							Fa	cing														
MAKE AND MODEL	Wheelbase (Ins.)	Chassis Weight (Lbs.)	Tire Size	Make and Model	Туре	Number of Driving and Driven Disks	Maximum Dia. (Ins.)	Minimum Dia. (Ins.)	Number	Make		Number of Forward Speeds	Low Gear Ratio	Universals Type and Make	Make	Туре	Final Drive	Gear Ratio	Propulsion Taken By	Torque Taken By	Minimum Road Clearance (Ins.)	Differential Make
Peerless Std. 8 Peerless Master 8 Peerless Custom 8 Pierce-Arrow 41-42 Plymouth 30U			5.50/19 6.00/19 6.50/19 6.50/19 7.00/18 4.75/19	Roc. 10RR Roc. 11-11 Roc. 11-11 Long29AM Long29AM	SP.	1-1	10 ³ / ₄ 10 ³ / ₄ 9 ³ / ₄ 9 ³ / ₄	$ \begin{array}{c} 6 \\ 634 \\ 634 \\ 634 \\ 614 \\ 614 \\ 618 \end{array} $	2 2 4	W-G W-G W-G Own	Eng Eng Eng Eng Eng	4 4 4	3.04 4.01 4.01 2.75	m-Spi m-Spi m-Spi m-Mec m-Spi m	Sal Own	12F. 12F. 12F. 12F. 12F. 12F.	SB SB Hyp	4.45° 4.42° 4.42° 4.42°	Spr Spr Spr	Spr Spr Spr TA Spr	103/8 81/2 81/2 81/4 81/4 81/4	Sal Sal Own. Own.
Pentiac1931	112		5.00/19	Own	SP		87/8	$5\frac{1}{2}$	2	Own	Eng	3		m-Mec	Own	½F	SB	4.55	Spr	Spr		Own.
Reo	125 130 135 144 ³ / ₄		6.50/17 6.50/18 6.50/18 7.00/20	Long. 1838 Long29AM Long29AM Own	dp	3-2	934 934 934	5½ 6¼ 6¼ 6¾	4	Own Own Own	Eng Eng Eng SeU	3	3.13 2.29 2.29	m-Det m-Det m-Det m-Own	Own.	½F ½F ½F FF	SB SB SB	4.07° 4.07°	Spr	Spr Spr Spr TT	81/4 8	Own. Own. Own. Own.
Studebaker Six 54 Studebaker Dic. 8 Studebaker Com. 70 Studebaker Pres. Stutz LA Stutz MA Stutz MB	114 114 124 130–136 127½ 134½ 145	2175	5.25/19 5.25/19 6.00/19 6.50/19 6.00/19 6.50/20 7.00/20	Long 8ABI Long 8ABI Long 9ABI Long 28AM B&B11Q Long 29AM Long 29AM	SPdpSPdp	2-1 2-1 3-2 2-1 3-2	91/4 91/4 98/4 88/4 107/8 107/8	$5\frac{1}{2}$ $5\frac{1}{2}$ $5\frac{1}{2}$ $5\frac{1}{2}$ $6\frac{3}{4}$ $6\frac{3}{4}$	2 2 4 2 2	Own. Own. Own. Own. Det. Det.	Eng Eng Eng Eng Eng Eng	3 3 4 4	2.86 2.86 2.87 2.83 3.49 3.49 3.49	m-Spi	Own Sal Tim	1/2F. 1/2F. 1/2F. 1/2F. 1/2F. 1/2F. 1/2F.	SB SB SB Wo Wo	4.73 4.73 4.31 4.5 4.25°	Spr Spr Spr Spr Spr Spr	Spr Spr Spr Spr Spr Spr	8½ 8½ 8½ 85/8 81/4 85/6 81/4	Own Own Own Tim. Tim. Tim.
Willys-Knight 66D Willys Six 97 Willys Six 98D Willys Eight 8-80D			6.00/18 5.00/19 5.00/19 5.50/19	Roc. 10LL B&B. 9-A1 B&B. 9-A1 B&B. 10R	SP.	1-1			2 2	Own Own Own	Eng Eng Eng	3	3.06 2.7 2.7 3.06	m-Spi m-Spi m-Spi	Own Own Own	1/2F 1/2F 1/2F 1/2F	SB	4.6		Spr Spr Spr	85/8 87/8 87/8 88/8	Own Own Own Own

ABBREVIATIONS:

°—Others also ‡—Overall Length A—Artillery (Wheels) Ada—Adams Al—Alemite A-Z—Alemite Zerk B—Ball Bearing B&B—Borg & Beck Bim—Bimel

B-L.—Brown-Lipe
BLC—Brown-Lipe Chapin
Bow—Bowen
Bel—Belflex
C&L—Cantilever (Springs)
C—Cone
Cle—Cleveland
CL—Clark
Col—Columbia
CR—Central Reservoir

CS—Carbon Steel
D—Disk
DH—Direct Hydraulic
DM—Direct Mechanical
Day—Dayton
Det—Detroit
Dis—Disteel
dp—Double plate
Eat—Eaton
EL—Elliott
Eng—Unit with Engine

ET—External Transmission

½E—Semi-Elliptie

¾E—¾Elliptie

F—Fabric (Shackles)

f—Fabric (Universals)

Faf—Fatmir (Ball Bearing)

Fai—Farmmount Machine Co.

Far—Farval

FE—Full Elliptic

½F—½Floating

¾F—¾Floating

FF—Full Floating
Fire—Firestone
Gem—Gemmer
Gdr—Goodrich
G-U—Goodrich and Universal Prod.
HYS—Hydraulic Vacuum Servo
Hyp—Hypoid
I—"1" Section
I-Hyp—Inverted Hypoid
IF—Internal Four Wheels
IR—Internal Rear Wheels

AMERICAN

		G	ENERAI											EN	GINI	E									
MAKE		1		٩	3	ñ e		ment	atio					Valve	18		Oiling S	ystem	E .	Fuel S	ystem	E	lectric	System	
AND MODEL	D. i.e.	100	Tire Size (Ins.)	Weight with Cab	Make and Mod	No. of Cylinder Bore and Strok (Ins.)	Rated H. P. (N.A.C.C.)	Pisten Displace (Cu. Ins.)	Compression R	Suspension	Cylinder Head	Number Cast in One Piece	Arrangement	Head Ma-	Drive	Piston Materia	Pressure to	Pump Type	Water Circulati	Carburetor Make	FuelFeed	Make	Current sein	Generator and Starter Make	Valtage
Bradfield Checker Ford General Mot(.M 18	00 10	6.50 332 4.75	18 4500 20 2500	Cont17E Buda. J214 FordA Own1257	4-37/sx41/4	27.3 24.03 28.3	214 200.5 257.5	4.22 4.5	3	Det Det	6 4 6	L L I	Sil Sil	Cha Cha Heli Heli	Al	abe Splash ab	Gear Gear	Pump Pump Pump Pump	Zenith Zenith Zenith Marvel	Air Gra Gra	D-R A-L Own D-R	B B B B	D-R A-L Own D-R	6

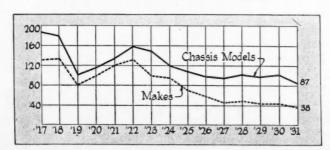
ABBREVIATIONS:
a—Main Bearings
A—Artillery
Al—Aluminum
A-L—Auto-Lite
b—Connecting Rods

DP—Double Plate (clutch)
D.R.—Delco-Remy
e.—Gear Case
Eng.—Unit with Engine
Ext.Da.—External Drive Shaft
F.—Fabric

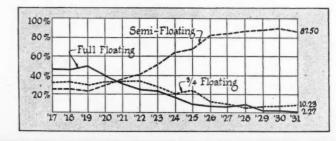
f—(Oiling System)—Rocker Arm ¾ F—¾ Floating ½ F—½ Floating F F—Full Floating GC—Grease Cups Gra—Gravity

Passenger

Number of Makes and Models



Types of Rear Axles Per Cent of Chassis Models Using Each



CHASSIS—Continued



	E	BRAKE	ES		F	ROI	A TV	XLE		STI	EERING	GEA	R		SPR	INGS	F .	SHACE	KLES	FR	AME	CHAS	RI-	RIN	AS	WH	EELS	
	Feet		Ha	nd										1	Frent		Rear					CATI	ON					
Type and Location	Braking Area (Sq. Ins.)	Application	Type and Location	Braking Area (Sq. Ins.)	Make	Axle Section Type	Camber (°)	Caster (°)	Axle End Type	Make	Type	Ratio (to one)	Minimum Turning Circle Diameter (Ft.	Type	Length and Width (Ins.)	Type	Length and Width (Ins.)	Make	Type	Material	Make	Make	Туре	Diameter and Width (Ins.)	Make	Туре	Make	MAKE AND MODEL
IF IF IF	162	DH.	IF		Own. Own. Own.	I. I. I. I. I. I.	2 1½ 1½ 1 2 1½ 1	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{3}{4}$ $1\frac{3}{4}$	RE RE RE RE	Ross. Ross. Ross.	C&L C&L C&L C&L C&L W&S W&S	16½ 16 16 20 20 13	44 48 39½	1/2E.	42x2¼ 42x2¼ 38x2 38x2 35½x1‡	1/2E. 1/2E. 1/2E.	60x2½ 60x2½ 61x2½ 535/8x1¾	RSI. RSI. Faf. Faf.	B B M.	St St CS St		Al Al Zerk	PG. PG. PG. PG.	19x4½ 19x4½ 19x4½ 18x5 19x3	Cle Cle K-H . K-H .	A A A W	Bim Bim K-H. K-H.	Peerless Std. 8 Peerless Master 8 Peerless Custom 8 Pierce-Arrow 42 Pierce-Arrow 41-42 Plymouth 30U Pontiac 1931
IF IF IF	180 280 280	DH DH DH	ET ET ET	4214	Own. Own. Own. Own.	I. I. I.	$\frac{1\frac{1}{2}}{1\frac{1}{2}}$	31/2	RE RE	Ross.	C&L C&L C&L W&N.	18 20 20	50	1/2E.	37½x2 38½x2 38½x2 43½x2	1/2E. 1/2E. 1/2E. C.	55%4x2 57½x2½ 57½x2½ 57½x2½	Fire ° Own. Own. Own.	M. M. M.	St St St	Smi. Smi. Smi. Own	Zerk Zerk Far Bijur	PG.	17x4 18x4½ 18x4½	Mot	A° W	Mot Mot Mot K-H	Reo
IF IF IF IF IF	148 148 202 288 238 238 238	DM. DM. HVS HVS	IF IF ET.	148	Own. Own. Own. Own. Sal Tim. Tim.	I. I. I. I.	1 1 1 1 1 1	2 1½	RE RE RE RE	Ross. Ross. Ross. Gem. Gem.	C&L C&L C&L C&L W&W. W&W. W&W.	15 15 17 20 18 18 18	39 39 38 48 48	LE LE LE LE LE LE LE LE LE LE LE LE LE L	36x1 ³ / ₄ 36x2 38x2 38x2 ¹ / ₄ 40x2 ¹ / ₄	1/2E. 1/2E. 1/2E. 1/2E.	54x13/4 54x13/4 56x2 60x21/2 60x21/4 621/4x21 621/4x21	Try Try Faf Faf Own Own	LM.	IST.	10 wn	Al Zerk Zerk Bijur Bijur	PG. PG. CR. CR.	19x4 19x4 19x4 19x4½ 20x4½ 20x4½ 20x4½	Mot	A W°. A	K-H. K-H. K-H. Mot	Studebaker Six 54 Studebaker Dic. 8 Studebaker Com. 70 Studebaker Pres. Stutz. LA Stutz. MA
IF IF IF	182 147 147 182	DM. DM. DM.	. IF	182 147 147 182	Own Own Own Own	I.	2 2 2 2	11/2	RE RE	Own.	C&L W&G. W&G. C&L	16½ 11 11 16½	42 40 40 42	1/2E 1/2E	39x1 ³ / ₄ 36x1 ³ / ₄ 36x1 ³ / ₄ 39x1 ³ / ₄	1/2E.	56x1 ³ / ₄ 49 ³ / ₄ x1 ³ / ₅ 51x1 ³ / ₄ 56x1 ³ / ₄	Try	M. M.	St.	Own Own Own	Al	PG.	18x3¼ 19x3 19x3 19x3¼		A° A° A°		Willys-Knight . 66D Willys Six 97 Willys Six 98D Willys Eight . 8-80D

Jac—Jacox
Jax—Jaxon
K-H—Kelsey-Hayes
M—Metal (Shackles)
m—Metal (Universals)
Mar—Marles
MD—Multiple Disk
Mec—Mechanics
Mid—Motor Wheel
Mun—Muncie Product
Mun—Muncie Product

MVS—Mechanical Vacuum Servo
NP—New Process
Om—Oilmeter
Opt.—Optional
PG—Pressure Gun
Par—Parish
P&B—Parish & Bingham
RSI—Rubber Shock Insulator
R—Rubber
RE—Reverse Elliott
rm—Rubber and Metal (Shackles)
Rec—Rockford

STM—St. Marys
STS—Standard Spring Steel Co.
T—Tubular
TA—Torque Arm
TT—Torque Tube
Tim—Timken
UP—Universa iProducts
UPM—Universa iProducts
Acchanics
Var—Varies

W—Wire Wheels
Wan—Warren
War—Warner Corp.
W-G—Warner Gear
We—Worm
WW—Wire Wheel Corp.
W&G—Worm & Gear
W&N—Worm and Nult
W&R—Worm and Roller
W&S—Worm and Sector
W&W—Worm and Wheel

TAXICABS

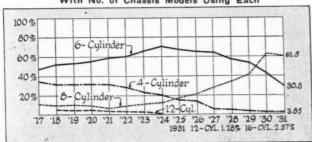
				TR	ANSM	11881	0 N									RUI	NNING	GEAR					
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ž	Тур	Mas	L e	N N	Numb	L K	ž	Tyr	E	3	Prop	Tak	F.	1 ±	Sha	F.	W.	Typ	S S	Spr	S S	Fra	
	M D D SP	Det N-P Own B-L			1-Spicer. 2-Spicer.	m m	Col Col Own Tim	½F ¾F ¾F	SB Hyd SB	4.5 5.09 3.7	Sp Sp T T	Sp Sp T T	Int-Fw	Ext-Ds Ext-Ds Int-Rw Ext-Ds		Col Col Own Tim	Own	C&L	PG PG	565/8	D	Trus	Bradfield5 Checker Ford.

Heli—Helical Gear Hyd—Hydraulie I—In Head Int—Integral Int-Fw—Internal Four Wheels

Int-Rw—Internal Rear Wheels L—Both Valves at Side m—Metal MDD—Multiple Dry Disc

Car Trends

Engine Types by Cylinders With No. of Chassis Models Using Each



Timing Drive Types

Per Cent of Models Using Each

R Gear 14.3	Chain 85.7%	
5 Gear 16.9	Chain 83.1%	



AMERICAN PASSENGER

				GENER	AL			SUSPE		CRANK		VAL	VES		t End		PI	STO	V	1	PISTON	PIN	C	ONNE	CTIN	G ROD	S
CAR	Engine			ent					in 1										3						L	ower Bea	arin
MAKE AND MODEL	Make and Model	No. of Cyls. Bore and Stroke (Ins.)	Rated H. P. (N.A.C.C.)	Piston Displacement	Compression Ratio (to 1)	Maximum Brake Horsepower at Spet. fied R.P.M.	Cylinder Blocks	No. of Points	No. of Cyls. Cast	Upper ‡—Sep. Casting	Lower	Arrangement	Exhaust Valve Head Material	Туре	Make of Chain or Non-Metallic Gear	Material	Length (Ins.)	표	Pin Center to Fop of Head (Ins.)	No. of Kings and No. Above Pin	Diameter and Length (Ins.)	Bearing In		Center to Center Length (Ins.)	Weight (Oz.)	Diameter and Length (Ins.)	Tune
uick 8-50 uick 8-60 uick 8-80, 8-90 adillac 355 adillac 370 adillac 452 hevrolet. hrysler Six hrysler 70 hrysler Eight chrysler Imperial 8 ord. L29	Own	8-3%x41% 12-3%x4 16-3x4 6-3%x3% 6-3%x4%	30.02 35.12 36.45 46.9 57.5 26.3 25.35 27.34 31.25	344.8 353 368 452 194 217.8 268.4 260.8 384.8 298.6	5 26 5 0 4 75 4 63 4 5 5 35 5 27 5 11 5 02 5 3 5 0 5 25 5 0	98-3400 12½-3000 77-3200 90-3000 104-2800 95-3000 135-3400 165-3400 50-2600 70-3200 88-3400 125-3600 110-2500	Ver. Ver. Ver. Vee. Vee. Ver. Ver. Ver.	4 Ri 4 Ri 4 Ri 4 Ri 5 Ri 5 Ri 5 Ri 4 Ri 4 Ri 4 Ri 4 Ri 4 Ri 4 Ri 4 Ri	1 8 1 8 1 8 1 6 1 6 1 6 1 6 1 6 1 6 1 6	CI CI Al Al CI SS CI	PS. PS. PS. PS. PS. PS. PS. PS. PS. PS.	L. I.	SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh.	Ch		Als CI CI SS SS CI Als Als Als CI	3 4 234 3 5 6 2 6 7 1 6	211/4	$\begin{array}{c} 2\frac{8}{16} \\ 2\frac{7}{16} \\ 2\frac{1}{4} \\ 2\frac{1}{16} \\ 1\frac{1}{16} \\ 1\frac{1}{16} \\ 1\frac{1}{16} \\ 2\frac{8}{16} \\ 2\frac{1}{16} \\ $	4-4 3- 3-3 3-3 3-3 4-3 4-3 4-3 5-5 4-4 5-5 4-4 3-3	76x2/2 2/2x 24x214 24x214 24x214 24x214 24x214 1x 22x 24x214 24x2	Pis Rod Rod Rod Pis FF FF	CS. CS. CM. CM.	91/4 81/8 10/6 87/8 10 9	1 2 2 2 2 2 3 2 1 3 2 1 3 2 2 2 2 4 1 3 4 2 2	\$\frac{5}{6} \times 1 \frac{1}{4} \\ 1 \times 1 \frac{7}{16} \\ 1 \frac{7}{6} \times 1 \frac{7}{16} \\ 2 \frac{7}{6} \times 1 \frac{7}{16} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 1 \frac{7}{6} \times 1 \frac{7}{6} \\ 2 \frac{7}{6} \times 1 \frac{7}{6} \\ 2 \frac{7}{6} \times 1 \frac{7}{6} \\ 2 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 3 \frac{7}{6} \times 1 \frac{7}{6} \\ 4 \frac{7}{6} \times 1 \frac{7}{6} \\ 4 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 6 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \frac{7}{6} \times 1 \frac{7}{6} \\ 7 \f	Sp Di Di Di Po Po Po Po Po
be Soto 8. CF be Vaux. Six bodge. 6 bodge. Six bodge. Eight buesenberg J burnant 6-14	OwnJ	6-33/6x4 6-31/6x41/6 6-31/4x41/4 8-27/6x41/4 8-3x41/4 8-33/4x43/4 8-33/6x41/2 6-31/4x4	26.45 27.3 23.4 25.35 26.45 28.80	5 220.7 214.7 189.8 5 211.5 5 220.7 0 240.3 420.0 322 199.0	5.2 5.4 5.2 5.2 5.2 5.2 5.3 5.3 5.06	67-3200 77-3400 65-3400 60-3400 68-3200 75-3400 84-3400 265-4200 114-3200 58-3100 70-3000	Ver. Ver. Ver. Ver. Ver. Ver. Ver. Ver.	4 R 4 R 4 R 4 R 4 R 4 R 4 R 4 R 4 R	u 8 i 6 u 6 u 6 u 8 u 8 u 8	CI CI CI CI CI CI CI CI CI CI	PS PS PS PS PS Al	L L L L L L L L	SiCh SiCh SiCh SiCh SiCh SiCh SiCh SiCh SiCh SiCh	Ch	Mor Mor L-B. L-B. Mor Mor	Als Als Als Als Als Als Als Als Als Als	2116 2116 2116 2116 2116 2116 2116 2116	20	21/8 2 21/6 2 25/8 25/8 25/8 25/8 25/8	4-4 4-4 4-4 4-4 4-4 4-4 4-4	18X 18X	FF FF FF FF FF FF FF	MS. MS. ASt. MS. MS. Dur CS. St. CS.	813 878 878 816 816 878 878 934 9	3221	1\f\x\1\f\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	D D P P P P P
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ordan 94 assalle. 345 incoln. 8 farmon Roosevel Aarmon Eight 66 farmon Big Eight farmon. 88 farmon. 11 fash. 6-66 fash. 8-74 ash. 8-874	Cont. 156 Own 34 Own 160 Own	S 8-27/8x43/4 S 8-3x43/4 5 8-33/6x41/8 8 8-31/2x5 8 8-21/2x5 8 8-21/2x5 8 8-21/2x5 8 8-21/2x5 8 8-31/2x43/4 8 8-31/4x43/6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	28.9 36.4 39.2 24.2 25.4 32.5 33.8 25.4 33.8 62.5 23.4 26.4 28.8	5 353 385 201.9 211.2 303.2 315.2 211.2 315.2 490.0 201.3 227.2 240.0	5 16 5 35 5 23 5 25 5 50 5 50 5 50 6 0 5 0 5 25	80-3000 85-3200 95-3000 120-2900 84-3400 110-3400 125-3400 84-3400 200-3400 65-3200 78-3800 87½-3400 115-3600	Ver Vee Ver Ver Ver Ver Ver Ver Ver Ver	4 R 3 R 4 R 4 R 4 R 4 R 4 R 4 R 4 R 4 R 4 R 4	tu tu ti tu tu tu tu tu tu tu tu tu tu tu	8 CI. 8 CI. 4 Al 4 Al 4 S CI. 8 CI. 8 SS. 8 CI. 8 SS. 8 CI. 8 SS. 8 SS.	PS. CI. PS. Al PS. PS. PS. PS. AL. PS. PS. PS. PS. PS. PS. PS. PS. PS. PS	L. L. L. L. L. L. L. L. L. L. L. L. L. L	SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. SiCh. ChN. ChN.	Ch. Ch. Ch. Ch. Ch. Ch. Ch. Ch. Ch. Ch.	Mor. Mor. Mor. Mor. Dia. Dia. Dia. Dia. Dia. Dia. Dia. Dia	Als Als SS Al Al Al Al Al Al Als Al	3 5 8 3 4 3 3 4 3 3 1 4 3 2 3 1 4 3 2 3 1 4 3 2 3 1 4 3 2 3 1 4 3 2 3 1 1 6 3	18 ¹ / ₁₄ ¹ / ₁₃ ¹ / ₄ 21 21 ¹ / ₁₃ ¹ / ₄ 13 ¹ / ₄ 21 18 19 ¹ / ₄	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	4-4 4-3 3-3 3-3 3-3 4-4 4-4 3-3 4-4 4-4	78x3\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Rod Pis. Pis. FF. Pis. FF. FF. FF.	St. St. St. St. St. St. St. St. St. St.	12½ 8½ 8½ 8½ 9½ 9½ 9½ 8½ 8½ 8½ 8½	34½ 37 28 28 48 48 28 60 25 23 34½	25/x11/8 23/x11/8 24/x23/4 2x21/2 2x11/4 2x11/4 2x11/2 2x11/4 23/xx11/2 23/xx11/2 23/xx11/2 24/xx13/8 11/xx11/8 2	- 1
Oakland. Jidsmobile F-3 Ackard. 826, 83 Ackard. 840, 84 eerless Std. 9 eerlessMastCus. Pierce-Arrow. 41, 42 Jymouth. Ontiac.	1 Own 3 Own 5 Own 8 Cont. 17 8 Cont. 13 13 Own	8-3	32 .5 39 .2 26 .4 36 .4 39 .2	3 251.0 197.5 3 320.0 2 384.8 5 246.0 5 322.0 2 366.0 2 385.0 3 196.0 3 200.0	5.06 5.0 5.0 5.07 5.07	85-320 115-320 125-300	O Ver O Ver O Ver O Ver O Ver O Ver O Ver O Ver	4 H 4 H 4 H 4 H 4 H 4 H	tu ti tu tu tu	8 CI. 6 CI. 8 AL 8 CI. 8 CI. 8 CI. 8 CI. 6 CI.	PS. AL. PS. PS. PS. PS. PS.	L	SiCh. SiCh. SiCh. ChN. ChN. SiCh. SiCh.	Ch. Ch. Ch. Ch. Ch. Ch. He. Ch. He. Ch.	Whit. Mor. Mor. L-B. L-B.	Als. Als. Als. Als. Als.	35/3 314 41/4 41/4	298 293 212	2.24 23 24 24 240 2.40 2.40 2.12	4-3-4-4-4-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3	4 \$5x2½ 4 \$5x2½ 4 \$6x3¼ 4 \$6x3¼ 4 \$6x3¼	Roc FF. FF. FF. Pis. Pis.	St. St. Car Car	9 9.029 823 817 71	30½	2½x1½ 1½x1¾ 2½x1¾ 2½x1¼ x1½ 2½x1½ 2½x1½ 2½x1½ 2½x1½ 2¼x1½ 2¼x1½ 2x1¾ 2x1¾	
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ABBREVIATIONS:

*—Crankcase Ventilator

*Others used

*—Main bearings

A-Bos—American Bosch

Al-Aluminum

A-L—Auto-Lite

Als—Aluminum Alloy with strut

AM—Air Maze

ASt—Alloy Steel

ATC—Air Tube Cellular

Au—Automatic
b—Connecting Rods
B—Battery
c—Camshaft bearings
Car-Carter (Carburetor)
Ce—Centrifuga |
Cel—Celoron
Cell—Cellular.
Ch—Chain
ChN—Chrome Nickel
Chr—Chromium

CI—Cast Iron
CM—Chrome Molybdenum
steel
Co—Chain, Overhead Camshaft
Cont—Continental
CS—Carbon Steel
CSM—Chrome Silica Manganese
d—Wristpins
DeJ—DeJon
Di—Distillation
Dia—Diamond Chain
Die—Die Cast

DM—Direct Mechanical
(Sliding Gear)
D-R—Delco Remy
Dur—Duralumin
Dyn—Dyneto
e—Timing Drive
Ecc—Eccentric
F—In head and side
F&T—Fin and Tube
Fed—Fedders
FF—Full Floating

Fi—Filter
GE—General Electric
Ge—Gear
Gra—Gravity
GS—German Silver
H—Horizontal
Ha—Hand
Han—Handy
Har—Harison
He—Helical Gear
I—Valve in Head

CAR ENGINES



		CRA	NK:	SHAFT		S	YSTEN	N		CC	OLI	NG SY	STEM		FU	EL SY	STEM				ELE	CTRIC	CAL S	YSTEM				
		_		Main Be			1					Rad	diator				Air Clean		1	gnition	3	Starter	ų	-	Bai	ttery		CAR
	Counterbalanced?	Torsional Vibration Damper?	Number	Front Diameter and Length (Ins.)	Rear Diameter and Length (Ins.)	Pressure to	Pump Type	Cleaner Type	Туре	Thermostat?	Shutters?	Make	Core Type	Shell Material	Carburetor Make and Size (Ins.)	Feed Type	Make	Туре	Make	Current Source	Spark Centrol	Generator and Sta Make	Starter Engagement	Length	Width	Height	Volts and Ampere-Hrs.	MAKE AND MODEL
Yes	es. es. es. es. es. es. es. es.	Yes. No Yes. Yes. No Yes. Yes. Yes. Yes. Yes. Yes. Yes. Ye	25 55 34 53 47 59 5	24x143 24x154 24x154 25x24 25x24 25x24 25x24 25x24 25x24 24x176 24x176 23x141 23x141 23x141	2%x15% 2%x13% 2%x13% 2%x26% 2%x25% 2%x36% 2%x36% 2%x36% 2%x26% 2%x26% 2%x26% 2%x36%	abce. abce. abce. abce. abce. abce. abce. abce. abce. abce. abce. abce. abce. abce. abce. abce.	Ge Ge	Fi* Fi* Fi* Fi* No* No*	Pu Pu Pu Pu Pu Pu Pu Pu	No No Yes. Yes. Yes. Yes.	Au Au Au Au Au Au Au Au Au	Har. Har. Har. Har. Har. Har. Mar.	Cell Cell RiC RiC Cell Cell Cell Cell Cell F&T ATC	PS. PS. PS. PS. PS. PS. PS. PS. PS. PS.	Sch. 11/2 Til. Mar. Mar. Mar. Own. 12/ Own. 11/ Car. 13/ Str 11/	GraMpMpVacVacVacMpMpMpMpMpMpMp	AC None None None AC	No In In No No No No	A-L. D-R. D-R. D-R. D-R. D-R. D-R. D-R. D-R	B	S-A. S-A. S-A. S-A. S-A. S-A. S-A. S-A.	D-R. D-R. D-R. D-R.	DM DM DM DM DM In .	10½x7 10½x7 9½x7 9½x7 10½x7 10½x7 10½x7 10½x7 10½x7 10½x7 11½x7	x92 x91 32x9 x93 x93 x93 1/2x1	14	6-60 6-85 6-100 6-120 6-130 6-130 6-90 6-84 6-117 6-100 6-153 6-104	Auburn 8-1 Austin 8-1 Buick 8-1 Buick 8-8 Buick 8-80, 8-1 Cadillac 3: Cadillac 3: Cadillac 4: Chevrolet Chryaler S Chryaler Eig Chryaler Imperial Cord. Cunningham V
NY NN NN NY	0 es.		5 4 4 5 5 5 5	21/4x15/8 21/4x15/8 21/2x1118 21/2x1118 28/x3.8	2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½ 2½x2½	abce . ab	Ge. Ge. Ge. Ge. Ge. Ge. Ge.	No *	Pu Pu Pu Pu Pu Pu Pu Pu Pu	Yes. Yes. Yes. Yes. No Yes.	No Au No Au No No	Win Mod MeC MeC	Cell. Cell. Cell. Cell. Cell. Cell. Tub. Tub.	PS. PS. PS. PS. PS. PS. PS. PS. PS. PS.	Car 11/4 Str13/4 Til Car Car Str13/4 Str13/4 Sch Sch 13/4 Str13/4 Str13/4 Str13/4	Mp. Mp. Mp. Mp. Mp. Mp. Mp. Mp. Mp. Mp.	None None	No	D-R D-R D-R D-R D-R	B	S-A. S-A. Au. S-A. S-A.	D-R. D-R. D-R. D-R. D-R. D-R. A-L. A-L.	DM. DM. DM. In	10 x 7 9 16 x 7 9 16 x 7 10 x 7 10 x 7 20 x 2 10 x 7 10 2 x 7 10 2 x 7	1/6X 1/6X 1/2X 1/2X 1/2X	87/8 87/8 87/8 88/4 88/4 811 98/8 818	6-100 6- 6-84 6-84 6-100 6-100 6-130 6-130	De Soto 6. De Soto 8. De Vaux. Dodge. Dodge. Dodge. Ei Duesenberg. dul'ont Durant 6 Durant 6
0 N 3/8 Y 0 N 0 N 0 N 0 N 0 N 0 N 0 N 0 N 10 lo les lo lo lo les les les les les les	Yes. No. Yes. Yes. Yes. Yes. Yes. Yes. Yes. Yes	37455775554	158x2 238x21133 238x1133 238x1133 238x1133 219x1133 219x1133 258x113 258x113 223x113 223x113 223x113 233x113 2	15/8x31/8 23/8x223/8x1 23/8x11/3 23/8x11/3 23/8x21/3 21/2x2 21/2x2 25/8x2 22/2x2 25/8x2 25/8x2 25/8x2 25/8x2 25/8x2 25/8x2 25/8x2 25/8x2 25/8x2 25/8x2 25/8x2	abed abed abed	Ge. Ge. Ge. Ge. Ge. Ge.	No No Fi* Fi*	ThPuAirPuPuPuPuPuPuPu	No Yes., Yes., Yes., Yes., Yes., Yes., Yes., Yes., Yes., Yes.,	No Au Au No No No No No No Au Au	Fed. Fed. Fed. Har. McC.	RiC. F&T. No Cell. Cell. F&T. F&T. F&T. F&C. Cell. Cell. Cell.	PS. PS. PS. PS. PS. PS. PS. PS. PS. PS.	Mar. 13, Zen	Vac. 1 Gra	AC. None. AC. None. AM. AM. AC. AC. AC. AC. AC. AC. AC. AC. AC. AC	In.	D-R.	B. B. B. B. B. B. B. B. B. B. B. B. B. B	Au Ha S-A. S-A. S-A. S-A. S-A. S-A. S-A. S	A-L. Own. D-R. D-R. D-R. D-R. D-R. D-R. D-R. A-L. A-L. A-L. A-L. A-L.	In	9x7½x7 93%x7 205%x5 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7 10-fx7	2x8	7/8 83/4 883/4 883/4 818 91/4 91/4	6-80 6-165 6-120 6-120 6-135 6-100 6-100 6-100 6-105	Essex Supi Ford. Gardner. Gardner. Gardner. Graham Spec. & Graham Spec. & Graham Cus. Hudson Gre Hupmobile. Hupmobile	
0 Y	Yes. Yes. Yes. No. No. No. No. No. No. No. No.	Yes No. Yes Yes Yes Yes Yes Yes Yes Yes	55. 55. 55. 55. 55. 55. 55. 55. 55. 55.	25/8x13/6 25/8x13/6 23/8x14/8 2x23/4 21/8x15/6 21/8x15/6 25/8x18/2 25/6x18/2 25/6x23/6 25/6x23/6 22/4x11/8 22/4x11/8 22/8x13/2	25%x2½ 25%x2½ 25%x2½ 23%x2½ 21%x1% 22%x2¾ 25%x2½ 25%x2½ 25%x2½ 25%x2½ 25%x2½ 25%x2½ 25%x2½ 25%x2½ 25%x2½ 25%x2½ 25%x2½ 25%x2¾ 25%x2 25	abce abce abce abce abce abce abce abce	Ge. Ge. Ge. Ge. Ge. Ge. Ge. Ge. Ge. Ge.	Fi* Fi* Fi. No Fi* Fi*	Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu.	No. No. Yes. No. No. Yes. No. Yes. Yes. Yes.	Au. Au. No. Ha. Au. Au. No. No. No. Au.	Har.	Cell. Cell. Cell. Cell. Cell. Cell. Cell. Cell. Cell. Cell. F&T F&T F&T F&T	PS. PS. PS. PS. PS. PS. PS. PS. PS. PS.	Str. 11 Str. 11 Own Str. 11 Sch. 13 Sch. 13 Sch. 13 Str. 11 Car. 11 Car. 11 Mar. Str. 11	Mp. Wp. Vac. Mp. Wp. Mp. Mp. Mp. Mp. Mp. Mp. Mp. Mp. Mp. M	AC. AM None. Uni. AC. AC. AC. AC. AC. AC. AC. AC. AC.	Ce. In In In In In In	D-R D-R D-R D-R D-R D-R A-L A-L A-L		S-A S-A S-A S-A S-A S-A S-A S-A S-A S-A	A-L	In In In In In In In In In In In In In I	10 16 x 10 16 x 10 16 x 10 17 x 10 18 x 10 18 x 10 18 x 10 18 x 10 18 x 10 18 x 10 18 x 10 18 x 10 18 x 10 18 x 10 18 x	7 % 7 % 9 % 9	91/2 91/2 (91/4 (91/8 (91/8 (91/8 (91/8 (91/8 (91/8 (91/8)	6-105 6-105 6-120 6-135 6-100 6-144 6-144 6-100 6-144 6- 6-105 6-120 6-120	Jordan. Jordan. LaSalle. Lincoln. Marmon Rees Marmon Eight Marmon Big I Marmon. Marmon. Marmon. Marmon. Marmon. Nash. Nash. Nash.
0	Yes Yes Yes Yes No. No. Yes		8. 4	3 2 1/4 x 2 1/4 4 2 1/4 x 1 1/2 5 2 1/4 x 1 1/2 5 2 1/4 x 1 1/2 5 2 5/8 x 1 5/6 9 2 5/8 x 1 3/4 9 2 5/8 x 1 3/4 9 2 1/4 x 1 1/2 9 1 1 1/4 x 1 5/6 9 1 1 1/4 x 1 5/6		abco	Ge.					Har. Har. Fed. Fed. Fed. Har.	Cell. Cell. Cell. Cell. Cell.	PS. PS. PS. PS. PS. PS. PS. PS. PS.	Mar. 13 Str. 15 Own Own Sch. 15 Sch. Str. 15 Car. 15 Mar. 15	Mp.	AC	In In In Ce.	N-E N-E A-L A-L D-R D-R	B. B. B. B. B. B. B.	S-A S-A S-A S-A S-A	D-R Dyn Dyn A-L A-L D-R	In In DM	13x7 11143 11143	95/8 95/8 95/8 6x9 71/6	818 x914 x914	6-80 6-14 6-16 6-10 6-12 6-13 6-13 6-84	O Oakland. Oldsmobile D Packard. 826 D Packard. 840 D Peerless. S PeerlessMast1 Piproce-Arrow. 4 Plymouth. Pontiac.
O O O O O O	No. Yes No. Yes No. No. No. Yes Yes	Yes. Yes. Yes. Yes. Yes. Yes. Yes. Yes.	S. S. S.	7 2 ** x 1 ** 6 9 2 ** 6 x 2 ** 6 x 2 ** 6 9 2 x 1 3 6 9 2 x 1 3 6 9 2 5 6 x 1 3 7 2 5 6 x 1 1 7 2 5 6 x 1 1 7 2 5 6 x 1 1 7	2 1 x 2 1 2 2 1 1 2 1 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1	abe	e. Ge. de Ge. de Ge. e. Ge. e. Ge. de Ge. de Ge. de Ge. de Ge.	Fi Fi Fi Fi Fi Fi Fi	Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu.	Yer Yer Yer	Au. Au. Au. No. No. No. No. No. No. No. No. No. No	Har. Har. Own McC. McC. Lon. Lon. Fed.	Cell. Tub. Tub. Cell. Tub. Tub.	PS. PS. PS. PS. PS. PS. PS. PS. PS.	Sch. 1 Sch. 1 Own Str. 1 Str. 1 Str. 1 Str. 1 Zen 1 Zen 1 Til. 1 Til. 1	1/2 Mp. 1/4 Mp.	Uni	Fi. Fi. Fi. Fi.	D-R D-R D-R D-R D-R D-R	B. B. B. B. B. B. B. B. B. B. B. B. B. B	S-A S-A	D-H D-F	Ch. In Ch	9 % 11 } 6 11 \$ 11 \$	x7½ x7½ x7½ x7½ x6¾	x914 x914 x914 x914 x914	6-11 6-12 6-90 6-12 6-12 6-12 6-13 6-13	1 Reo 30N 8 Reo 30N 10 Rolls Royce 5 Studebaker S Studebaker Co 8 Studebaker Co 8 Studebaker Co 9 Stutz MA, 20 Willys Six 97 22 Willys Eight 6 Willys Knight Knight

In—Inertia
Ir—Iron
Jam—Jamestown
Joh—Johnson
L-"L" Head
L-B—Link Belt
Lye—Lycoming
Mag—Magnetic Shift
Mar—Marvel
McC—McCord
Med—Modine
Mp—Mechanical Pump



1931 PASSENGER CAR BODY

NOTE: The body models listed below represent the lowest

		GE	NERAL						ВО	DY										DAI					
		-				T		(Covering	Materials			9	1	Class				ator			-	Set	ple	
MAKE & MODEL OF CHASSIS	Body Model	Price (\$)	Wheelbase (Ins.)	Tire Size (Ins.)		Number of Doors	Body Framework Material	Body Panels	Rear Upper Quarter Sections	Upholstery	Төр	Type of Finish	Wheels (Type and Make)	Shock Absorbers	ke)	Rack	1 1	Spare Tire Lock	1 66	Dash Gasoline Gage	Car Heater	Rear Traffic Signal	Vanity and Smoking Set	Clock Front Seat Adjustable	Locks and Theft- proof Devices
	Sedan	995		5.50/17	-1114	4	W&SS	Steel	Steel	В-М		Pyrox	AM		DR.	NN	N	N	Y	Y	N	YY		NY	
	Phaeton	395 1055	114	3.75/18 5.25/18	1130 2875	2 4	W&S8	Steel	Steel	Leather	Fabric	Pyrox	D	N	0.	NN	ZZZZZZZZZZZZZZZZZZ	ZZZZZZZ	N N Y N Y N Y N Y N Y N Y N Y N Y N Y	Y	N	YNN YN YN YN YY YY YY YY YY YY YY YY YY	N	N N N N N Y	I,S
uick 8-50	Sedan	1035 1335	114	5.25/18	3065 3525	2	W&S 8	Steel	Steel		Im.Lea Fabric	Pyrox		N N	Lo	NIN	JN	N	NY	Y	N	N Y	N	NN	I,S
uick 8-60	Phaeton	1355	118	5.50/19 5.50/19	3795	4	W&S 8	Steel	Steel	Varies	Im.Lea.	Pyrox	. A	N	Lo.	NN	N	N	NY	Y	N	NY	N	NN	I,S,D.
luick 8-80	Sedan	1565 1610	124	6.50/19 6.50/19	4255			Steel	Steel	Varies Leather	Im.Lea Fabric	Pyrox	. A	NNN	Lo	NN	J N	N	N S	Y	N	NY	N	NY	I,S,D.
Buick 8-90	Sedan	1785	132	6.50/19	4340	4	W&S 8	Steel	Steel	Varies	Im.Lea.	Pyrox.	. A	N	Lo DR.	NY	N	N			N	NY	N	NYN	I,S,D.
adillac 355	Phaeton	2945 2795	134	6.50/19 6.50/19	4380 4645					Steel	Steel	Pyrox.		Y	DR.	Y		N	YYYYYYYYY	YY	N	Ŷ	Ŷ	Ŷ	I,D.
Cadillac 370	Phaeton	4045 3895	140	7.00/19	4950	4	W&S	Steel	Steel	Steel	Steel	Pyrox.	. AK.	Y	DR.	YYY	JN	N	Y	YYY	N	YY	N	Y	I.D.
	Sedan Phaeton	6150	148	7.00/19 7.50/19	5215	4	W&S	Steel	Steel	Steel	Steel	. Pyrox.	AK	Ŷ	DR.	Ŷ	NN	N	Y	YY	N	Ŷ	N	Y	I
Cadillac 452	Sedan Phaeton	5950	148 109	7.50/19 4.75/19	5835	4		Steel	Steel	Steel	Steel	Pyrox.		Y	DR. Lo	YI	N N	N	Y	NN	N	YN	N	NN	I
Chevrolet	Coach	545	109	4.75/19		2	W&S	Steel	Steel	Steel	Steel	. Pyrox.	WO.	N.	Lo	N	NN	N	Y	Y N N N	N	YN	NN	NN	I,D
ChryslerSix	Sedan Phaeton		116 182‡	5.25/19 5.50/18	3315	4		Steel	Steel	Bedf. C Leather		Pyrox.			Lo Ho	N	NN	N	Y	YY	N	N	YN	N	F
Chrysler70	Brougham		1821	5.50/18	3490	2	M&W	Steel	Steel	Mohair.		. Pyrox.	A	Y	Но	N	N N N N	N	Y	YY	N	N	YN	N	F,D.
ChryslerEight	Phaeton Royal Sedan		186‡ 186‡	5.50/18 5.50/18		4	Steel	Steel	Fabric Steel	Varies		Pyrox.	A	Y		N	N N	Ñ	N	Y Y Y Y	N	N	YS	N	I,D.
ChryslerImp. 8	Sedan	2745	211‡ 137½	7.00/18	4703	5 4	W&S	Steel	Steel	Mohair.	Fabric.	Pyrox.	WI	Y	Но	N	NN	N	N Y	YYY	N	Y	N Y Y S		Y I,D.
	Touring	7500	132	7.00/20	470							. Pyrox.	C	Y	Ho		N N Y N	Y	Y	Y Y Y Y Y Y N Y	NA	Y	Y S Y N Y Y	Y	NI.
CunninghamV-9 De SotoSix	Petite Cab Sedan	9600	132 1691/81	7.00/20 4.75/19	270	5 4	Steel	Steel	Steel	Broad		Pyrox.	Α	. N	Ho	N	Y N N N	YNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	N	NY	N	N		N	Y I,D
De Soto Eight	Sedan	998	177	5.25/19	296		Steel	Steel	Steel	Broad		Pyrox. Pyrox. Pyrox. Pyrox. Pyrox. Pyrox. Pyrox.	A	. N		N	NN	N	N	N Y		N ;	Y S Y S Y .		Y I,D.
De VauxSix	Phaeton	69	5 113 5 113	5.00/19 5.00/19	272	5 4		Steel	Steel	Leather . Mohair.		Pyrox	W		1.11	1.1	NN	N	N	YY	Y	1	Ŷ		Y D
Dodge Bros	Phaeton	77.	169 ³ / ₄	5.00/19 5.00/19	252	1 4	Steel	Steel	Steel	Leather.		Pyrox.	AK	N	DR.	N N	NN	N	N	NY	YN	N .	Y	N	Y D
Dodge BrosSin	Sedan	84	5 114	15.00/19	282	0 4	Steel	Steel	Steel	Varies		Pyrox	W.	. N		N	NN	N	N	N Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	N	N	YS	SN	Y I,D.
Dodge Bres	Phaeton	108	0 1767/8: 5 1767/8:	5.50/18		0 4	Steel	Steel	Steel	Leather		Pyrox	AM	I. N	DR.	ZZZZ	NN	N N N N N N N N N N N N N N N N N N N	NNNNNY	Y	YN	NNYYNNNNNYY	Y		Y I,D
Dodge Bros Eigh	Sedan	113	5 118	5.50/18	3 317	4 4	Steel	Steel	Steel	Varies		Pyrox Pyrox	W.		T	N	N	N	N	Y	N	N	Y	N	Y I,D.
duPont	Spt. Phaeton.		141	7.00/20								Pyrox Pyrox	AS.	. Y	Lo.	N	Y	YY	Ñ	Y	YN	Ŷ	Ŷ	Ŷ	N I,D.
Durant 614	Phaeton	96	$\begin{array}{c} 141 \\ 0 \ 172\frac{1}{2} \\ 5 \ 172\frac{1}{2} \end{array}$	5.00/19	9	. 4	M&W	Steel	Steel	Leather.		Pyrox Pyrox	AK		Mo. Mo.	N	N	N Y	Y	Y	YN	N	YN		NI. YI,D
	Spt. Phaeton.	118	5 1761	5.50/19	9		M&W	Steel	Steel	. Leather .		Pyrox	AK	. N	Mo.	N	N	Y	Ŷ	N :	YN	N	NN	NN	NI.
Durant61	[Deuaii	106	5 176‡ 5 113	5.50/19		- 4	M&W.	Steel	Steel	Mohair.	Im.Lea	Pyrox	AK	. N	Mo Mo	N	N	NN	N	Y	Y N Y N	N	YN	SNNN	Y I,D
	Phaeton	43	5 1031/2	4.75/1	9 221	12 4	Steel	Steel	Steel	. Im.Lea.	RFC.	Pyrox	W	D. N	Ho.	Y	NYNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	NN	YYNNNY	N	Y N Y N	N	Y	N	N I,D
Ford.	Tudor Sedan.	249	$0 103\frac{1}{2}$ 5 125	4.75/1 6.50/1		75 2	Steel	Steel	Steel	. Im.Lea.	RFC.	Pyrox	A	Y	Ho.	Y	N	NN	Y	ZZZZ	YN	Y	Y	YY	N
Franklin 15 Trans	Sedan	229	5 125	6.50/1	9	4	4	Ge A		T 41		Pyrox	A.	A. Y	DR	Y	N		Y	N	YN	Y	Y	YY	N D
Franklin DeLuxe 1	Sedan	269		6.50/1		10	Wood .	S&A Steel	. Steel	B-B.		Pyrox	AN	1. Y	DR	Y	N	N N N N N Y	Ñ	N	ŶŃ	Ŷ		Y Y Y N	Y I,D.
Gardner13	6 Snt. Sedan.	127	0 122 5 125	5.50/1 5.50/1	9 32	50	4 M&W. 4 M&W.	Steel	. Fabric	Mohair. Leather		Pyrox			Lo.	N N	N	NY	N	Y	YN	Y	Y	N N N N	NI,D
Gardner14		179	5 125	5.50/1	9 34	00	4 M&W.	Steel	Fabric	Mohair.		Pyrox	AI	2. 3	Lo.	N	N	NY	N	Ÿ	YN	Y	Y	NN	NID.
Gardner 15 Graham Std.	8 Brougham	. 212	20 130 05 115	6.50/1 5.50/1	8 38	20	4 M&W. 4 M&W.	Steel	. Fabric Steel			Pyrox		E. 3	Lo.	N	N	NN	N	Y	YN	N	Y	NN	N I,D Y I,S,I
Graham Spec.	6 Town Sedan.	. 9	75 115	5.50/1	8 32	70	4 M&W.	. Steel	. Steel	D-16 C		Pyrox	A.	1	DR	N N	N	NN	N	Y	YN	N	Y	N N N N	Y I.S.I
Graham Spec. 8-2 Graham Cus. 8-3	4 Sedan	18	95 120 45 134	6.00/1		00	4 M&W. 4 M&W.	Steel	Steel	Bedf. C.		Pyroz	A.		IDR	. N	N	NIN	ZZZZZZZZZZZZZZZ	Ŷ	YYNNYYNNYYNNYYNNYYNNYYNNYYNNYYNNYYNNYY	NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	YN	Y I,S,I
HudsonGreat	Phaeton		95 119 95 119	5.50/1			4 Steel 2 Steel	Steel	Steel.	Leather		Pyroz		M.	Wh	Y	Y	NN	N	Y	YN	N	Y	NNSN	NI. YI.D.
	Tour. Sedan	. 11	45 126	5.50/1	8		4 Steel	. Steel	. Steel.			Pyroz	Al	M.	Wh	1. Y	Y	IN I	11.11	Ŷ	W V	4 74	Y	SN	Y I
Hudson Great	Brougham	111	95 126 50 113 ½	5.50/1 5.50/1	9 27	75	4 Steel 4 Wood.	Steel.	Steel.	Leather		Pyro		M. 1	Wh Ga	N	Y	NI	IN	Y	YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY	N	Y	SNNSN	Y I,D. N I. Y I,D.
HupmobileS-	Sedan	. 9	$95 113\frac{1}{2}$	5.50/1	9 29	05	4 Wood.	. Steel	. Steel.	Mohair.		Pyro	A.]	Ga	. N	N N	N	N	Y	Y	N	Y	SN	
Hupmobile	L Phaeton	13	50 118 95 118	5.50/1 5.50/1	9 31		4 Wood. 4 Wood.	Steel.	Steel.	Leather Mohair.		Pyro	A	K. 1	V Ga V Ga V Ga	N	N	N	N	Y	Y	N	Ŷ	N N N N	Y I,D.
Hupmobile	C Std. Sedan	. 15	95 121	6.00/1	19 36	40	4 Wood.	Steel.	. Steel.	Mohair.	,,	Pyro	r A.		V Ga	. N	Y	NI	N	Y	Y	N	N	SN	Y I,D
	U Vic. Coupe		95 125 95 137	6.50/1			4 Wood. 2 Wood.	Steel.	Steel.	M-B		Pyro	K A.	1	V Ga	N	N	N	N	Ŷ	Ŷ	N	Ŷ	SN	N I,D
Jordan	SedanSpeed. Phae	. 17	95 120 95 125	5.50/1	18 35	90	4					Pyro	k A.	M I	Y Ho	N N N N N N N N N N N N N N N N N N N	N N Y N N N N N N N N N N N N N N N N N	Y N N N N N N N N N N N N N N N N N N N	NN	Y	Y	NY	Y	S N S N S Y Y Y S Y N Y Y Y	Y I,S,I
Jordan	Sedan	. 22	95 125	6.00/	18 37	90	4					Pyro	K A	M	N Ho	N	Ñ	N	NY	Ŷ	Y	NY	Ñ	SYNY	N I.S. Y I.S. N I.T
La Salle36	Sedan	32	45 134 95 134	6.50/		35	4 M&W. 4 M&W.	Steel.	Steel.	Leather Varies		Pyro Pyro		K.	Y DI	S. Y	N	N	N Y N Y Y Y	Y	Y	NY	Y	YY	Y I,T,
	Spt. Phaeton.	. 44	00 145	7.00/	19 48	350	4 M&W.	. Alum.	Alum.		Fabri	e Pyro	x W	O.	Y Ho	Y	Y	Y	YYY	Y	Y	N Y Y Y N Y N N N N N N N N Y N Y Y N Y	Y	NYY	Y I.S. Y I.S.
Lincoln. Marmon Roosevel	Town Sedan.		00 145 85 172‡	7.00/ 5.50/		333	4 M&W. 4 M&W.	Steel.	Alum.	Broad.		Pyro Pyro	x A			S. N	N	N			Y	NN	Y	NN	N I,D
Marmon Eight	Phaeton	. 16	10 180 1	5.50/	19 31	106	4 M&W.	Steel.	Steel.	Leather Broad.		Pyro	x A	E.	N DI N W N W Y W Y W	h. N	N	N	N N N N N N N N N N N N N N N N N N N	Y	Y	NN	Y	NNN	Y I.D
	Sedan Phaeton		20 180 ± 20 191 ±	5.50/ 6.00/	19 39	03	4 M&W 4 M&W	Steel.	Steel.	Leather		Pyro	x A	Ē.	YW	h. 3	N	N	NY	Y	Y	NY	Ŷ	NN	Y I,D
	Sedan	. 20	20 1911 20 2021	6.00/	19 40)28	4 M&W	Steel.	Steel.	Broad.		Pyro	x A		Y W Y W	h. 3	Y	N	N Y N Y	YY	Y	NY	Y	YYY	Y I,D
Marmon Big Eig Marmon.	ht Sedan 70 Sedan	. 9	95 1123	6.50/ 5.50/	19 28	363 323	4 M&W 4 Steel		Steel.	broad.		Pyro	x A					1.							
	88 Sedan		95 130	6.50/	19		4 Steel.				1	Pyro	x A	- 1	1			11		.1	1 1		.1		1 1

ABBREVIATIONS:

*—Italics denote Shipping Weight
;—Overall Length
cuthers furnished
A—Artillery-Bimel
AJ—Artillery-Bimel
AJ—Artillery-Kelsey-Hayes
AI—A-Aluminum
AM—Artillery-Motor Wheel

AS—Artillery-St. Marys
AU—Artillery-Mutual
B-B—Broadcloth or Bedford Cord
Bedf. C.—Bedford Cord
B-L.—Broadcloth or Leather
Broad—Broadcloth
C—(Wheels) Optional
CM—Wood or Wire Optional
Motor Wheel
D—Door (Lock)
DM—Disk-Motor Wheel

DO—Disk-Own
DR—Delco-Remy
F—Fedco Numbering
Fab. Lea.—Fabric Leather.
Ga—Gabriel
Ho—Houdaille
I—Ignition
Im-Lea.—Imitation Leather
Le—Lovejoy
Lv—Leather or Velour
M-B—Mohair or Broadcloth

Mo—Monroe
M&W—Metal & Wood
N—No or None
On—Own
Opt—Optional
P-M—Plush or Mohair
P-y-Fa—Pyroxylin Finish
RCF—Rubber Costed Fabric
S—Steering Wheel Lock
S&A—Steel and Aluminum

T—Transmission Lock
W—Wire (Wheels)
Wa—Watson
WB—Wire-Budd
WD—Wire-Dayton
Wh—Wah
WM—Wire-Motor Wheel
WO—Wire-Own
WS—Wire-St. Marys
W&S—Wood and Steel
Y—Yes

EQUIPMENT SPECIFICATIONS

priced 4-5 passenger open and closed bodies fitted on each chassis



		GEN	ERAL					В	DDY									PME					
						1		Coverin	g Materia	ls		1		Glass	I		icator		T	_ 3	ing Set	9	
MAKE & MODEL OF CHASSIS	Body Model	Price (\$)	Wheelbase (Ins.)	Tire Size (Ins.)	Weight of Complete Car (Lbs.)*	Number of Doors Body Framework	Body Panels	Rear Upper Quarter Sections	Upholstery	Tep	Type of Finish	Wheels (Type and Make)	orbers	patterable	Trunk Mack	Spare Tire	Spare Tire Leck Engine Heat Indic	9	Cigar Lighter	fic Si	Clock	Front Seat Adjustable	Locks and Theft-
	Spt. Phaeton.	895	1141/4	5.00/19	2640	4 Wood	Steel.	Fabric.	Leather		Pyrox.	AM.	N Lo.	N	NN	N	NY	Y	NN	Y	NN	N LS	S
ash6-60	Sedan	795	1141/4	5.00/19	2740	2 Wood	. Steel	. Steel	Mohair.		Pyrox	AM.	N Lo.	N	NN	N	NY	Y	NN	Y	NN	Y L	S
	Spec. Sedan		1161/4	5.25/19	3000	4 Woo		Steel	Mohair		Pyrox	AM	N Lo.	N I	NN	N	NY	Y	NN	Y	SN	Y 1,8	S
ash8-80	Sedan	1295	121	5.50/18	3360	4 Woo		. Steel	Mohair		Pyrox	AM	N Lo.	N	NN	N	NY	Y	NN	Y	SN	Y I,	T
ash8-90	Sedan	1565		6.50/19	4000	4 Woo	I. Steel.	Steel	Bedf. C.		Pyrox	. AM	N Lo.	N	NN	N	NY	(\mathbf{Y})	NN	Y	SY	YI,	T
akland8		895	117	5.50/18	3173	2 M&V		Steel	Mohair	RCF	Pyrox	. WM	N Lo.	N.	NN	N	NIV	Y	NN	Y	NN	N 1,	D
Idsmobile F-31 Std	Sedan	845	1131/2	5.25/18	2855	2 W&S	Steel.	Steel	Mohair.	RCF	Pyrox	CM.	Y Lo.	N .	NN	N	NI	Y	NN	Y	NN	Y 1,	D
IdsmobileF-31 DeL	Sedan	910	1131/2	5.25/18	2925	2 W&S		Steel	Varies	RCF	Pyrox.	CM	Y Lo.	N N	XIN	Y	Y	Y	NN	Y	NN	Y 1,	D.,
ackard826	Sedan		1271/2	6.50/19	4479	4 M&V		Steel	Broad		Pyrox	DM DW	Y On.	Y	NN	N	I I	7 37	NI	I I	I I	Y 1,	,υ
ackard833	Phaeton	2420	1341/2	6.50/19	4185	4 M&V	V. Steel.	Steel	Leather.		Pyrox	DM DM	Y On.		NN		I I	Z X	NI	X	NY	I I	· · · ·
	Club Sedan Phaeton	20/0	134½ 140½	6.50/19 7.00/19	4488	4 M&V	V. Steel.	Steel	Broad.		Pyrox	DM	Y On		NN	N	VI	7 3	NV	V	Y Y	I I,	υ
ckard 840								. Steel	Leather.	******		DM DM	Y On.	Y	N N	IN NT	VI	V	NU	V	I I	I I	n
eerless Std. 8	Sedan	1495	1401/2	7.00/19 5.50/19	4955 3515	4 M&V		Steel	Broad	RCF	Pyrox	AE.	Y Ga.	Y	VN	N.	VX	Z V	NU	V	VV	V T	D
eerless Master 8	Sedan	1995		6.00/19	4293	4 M&		Steel	Mohair.	RCF	Pyrox	AE.	Y Ga.	v	NIN	V	VI	V	NV	Ť	VV	VII	D.
eerless Cus. 8		2795	120	6.50/19	4540	4 M&		Steel	Broad.	RCF	Pyrox	AE.	Y Ga.	v	VN	v	vi	v	NV	v	v	V 7	D
	(Sat Tourer	2895	134	6.50/19	4641	4 Ash.	Steel.	Steel	Leather	HCF	Pyrox	AK	N Lo.	v	VN	Ñ	NI	v v	NV	v	v	VS	D
ierce Arrow43	Sedan	2685	137	6.50/19	4870	4 Ash.	Steel	Steel	Broad.	1	Pyrox.	AK	N Lo.	v	VIN	N	NY	v	NV	Ŷ	vv	VS	D
	Tourer	3450		7.00/18	4938	4 Ash.	Steel.	Steel	Leather.		Pyrox	AK.	N Lo.	Ŷ	YN	N	NY	Y	NY	Ŷ	ŶŶ	VS	
ierce Arrow42	Sedan	3695		7.00/18	5277	4 Ash.	Steel.	Steel	Broad.		Pyrox.	AK	N Lo.	Ŷ	YN	N	NI	YY	NY	Ŷ	ŶŶ	Y S.	D
ierce Arrow 41 LeB	Conv. Sedan	5200		7.00/18		4 Ash.	Steel.	Steel	Broad	1	Pyrox.	AK.	N Lo.	Ŷ	YN	N	NI	YY	NY	Ÿ	ŸŸ	YS	
	Phaeton		167‡	4.75/19		4 Woo		Fabric.	Leather.		Pyrox.	. W.	N		NN	N	NN	VY	N N N N	Ÿ	NN	NI	
'lymouth30 U	Sedan	565	167‡	4.75/19		2 Steel	Steel.	Steel	Bedf. C.		Pyrox	W	N	N	NN	N	NI	Y	NN	Y	NN	NI	
ontiac 1931		675	112	5.00/19	2763	2 M&	V. Steel.	. Steel	Mohair.	RCF	Pyrox.	WK	N Lo.		NN		NI		NN	Y	NN	NI.	D.
eo25 N		1695	125	6.50/17	3950	4	Steel.	. Steel			Pyrox	AM.				1				1.		D	5
leo 30 N	Sedan	1995	130	6.50/18	4375	4	Steel.	. Steel			Pyrox	. AM										D)
leo Royale 35N	Sedan	2485		6.50/18	4650	4 M&		Steel			Pyrox	. WM										D)
	Tourer		114	5.25/19	2840	4 W&		Steel	Varies		Pyrox	AK.	Y DR.	N	NN	N	N	YY	NN	Y	NN	Y I,	,D.
tudebakerSix 54			114	5.25/19	2900	4 W&		Steel	Varies		Pyrox	. AK.	Y DR.	N	NN	IN	N	YY	NN	Y	NN	YI,	,D.
tudebakerDic. 8		1150		5.25/19	3095	4 Was		Steel	Varies		Pyrox	AK.	Y DR.	N	NI	N	N	YY	NN	Y	SN		,D.
tudebaker Com. 70	Sedan	1585		6.00/19	3525	4 W&		Steel	Varies		Pyrox	AK.	Y Lo	Y	NI	N	N	YY	NI	Y	SN		,S,D
tudebaker Pres. 80	Sedan	1850	130	6.50/19	4250	4 W&	Steel.	Steel	Varies		Pyrox	. AK.	Y Ho	Y	NI	N	N	YY	YY	Y	YY		,S,D
tudebaker Pres. 90		2350	136	6.50/19	4275	2 W&		Steel	Varies		Pyrox	. WK	Y Ho	Y	Y	N	N	YY	NI	Y	YY	Y 1,	,S,D
tutzLA	Speedster	2585	1271/2	6.00/19	4155	4 M&	V. S&A.	Alum.	Leather.		Pyrox	. AM.	Y Ga	Y	Y	Y	N	YY	N J	Y	NY	N 1,	т.
tuto	Coupe	1995	1271/2	6.00/19	4200	2 M&	V. Steel.	Steel	Broad	Py-Fa.	Pyrox	. AM	Y Ga	Y	N	Y	N .	YY	N I	Y	YY	Y I,	,D,7
tutzMA	Speedster		1341/2	6.50/20	4775	4 M&		Al-F	Leather.	RCF	Pyrox	AM.	Y Ga	Y	Y	Y	Y	II	N 3	X	NY	NI.	.S.
	Coupe		1341/2	6.50/20	4950	2 M&		Steel	M-B	Py-Fa.	Ругох	. AM.	Y Ga	Y	Y	Y	Y	IX	N	Y	XX	Y L	D.S
StutzME		3855		7.00/20	5045			Steel	М-В	Py-Fa.	Pyrox.	. AM	Y Ga.		NT N	I N	NI .	UU	NI	T	N X	Y I	,D,8
Willys Knight . 66D		1095		6.00/18	3483			Steel	Broad		Pyrox	. A	N Mo.	N N	N P	N IN	N ,	I I	NY N	I	SN	I L	,D.
Willys Six 97	Touring	045	110	5.00/19	0000	4 Woo		Steel	. Leather.		Pyrox	. A	N Mo.	N	AT S	J N	N	NY	NN	N	NN	X I	7
	Sedan		110	5.00/19	2670		d. Steel.	Steel	Walnut		Pyrox	. A		N									D.
Willys Six 98D		795	113	5.00/19	2706			Steel	Velvet		Pyrox.		N Mo.	ZZZZZ	NI	NN		N Y Y Y	NN		SN		d,l
Willys Eight 8-80 D	Sedan	995	121	5.50/19		4 Woo	d Steel .	Steel	. Broad		Pyrox.	. A	N Mo	IN	14 1	N 24	IN	IX	IN I	N X	BA	Y I	·.D.

ABBREVIATIONS:

- *—Italies denote Shipping Weight

 —Overall Length

 —Others furnished

 A—Artillery

 AE—Artillery-Bimel

 AJ—Artillery-Kelsey-Hayes

 AI—A-Auminum and Fabric

 Alum—Aluminum

 AM—Artillery-Motor Wheel

- AS—Artillery-St. Marys
 AU—Artillery-Mutual
 B-B—Broadcloth or Bedford Cord
 B-L—Broadcloth or Leather
 Broad—Broadcloth or Leather
 Broad—Broadcloth
 C—(Wheels) Optional
 CM—Wood or Wire Optional
 Motor Wheel
 D—Door (Lock)
 DM—Disk-Motor Wheel

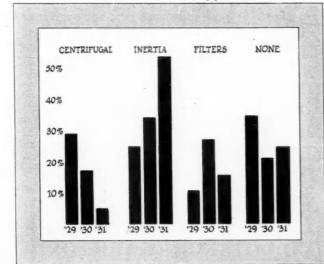
- DO—Disk-Own
 DR—Deloo-Remy
 F—Fedoo Numbering
 Fab. Lea.—Fabric Leather.
 Ga—Gabriel
 He—Houdaille
 I—Ignition
 Im.Lea.—Imitation Leather
 Le—Lovejoy
 M-B—Mohair or Broadcloth

Mo—Monroe
M&W—Metal & Wood
N—No or None
On—Own
Opt—Optional
P-M—Plush or Mohair
P-y-Fa—Pyroxylin Finish
RCF—Rubber Coated Fabric
S—Steering Wheel Lock
S&A—Steel and Aluminum

T—Transmission Lock
W—Wire (Wheels)
Wa—Watson
WB—Wire-Budd
WD—Wire-Dayton
Wh—Wahl
WM—Wire-Motor Wheel
WO—Wire-Own
WS—Wire-St. Marys
W&S—Wood and Steel
Y—Yes

U. S. Passenger Car Engine Equipment Trends Oil Cleaner Types

Air Cleaner Types



OTHERS VENTILATORS FILTERS 30% 20%

Per Cent of Models Equipped With Each Type

BRITISH PASSENGER CAR CHASSIS

	Chassis Weight (Lb.)	1900 1900 1900 1900 1700 1700 1700 1700
	Wheels Type	Wire- Disk. Disk. Disk. Disk. Disk. Disk. Wire-
	Steering Gear Type	WN WN WN WN WN WN WN WN
S	4-Wheel Operation	DDM
BRAKES	1001	
	bnsH	IRW IRW
SPRINGS	Rear	
SPRI	Front	ESSESSESSESSESSESSESSESSESSESSESSESSESS
	Torque Taken By	TITT TITT TITT TO THE PROPERTY OF THE PROPERTY
XLE	Propulsion Taken By	88 RR R R R R R R R R R R R R R R R R R
REAR AXLE	Genr Ratio	ರೂಡಾಗುವಾಡಾ 5000 44 ನಗಳ 4600 440 440 440 800 44 44 44 44 44 440 440
SE E	Fina! Drive	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	Type	HALE THE STATE OF
	Universals Number and Type	2.Mec. 2.Met. 2.Met. 2.Met. 2.Met. 2.Met. 1.Met. 1.Met. 1.Met. 1.Met. 1.Met. 1.Met. 2.Met. 3.Met. 2.Met. 3.Met. 3.
SION	No. of Speeds	ORMARONO ACCACACACACACACACACACACACACACACACACACA
TRANSMISSION	Lecation	Eng. Sep. Sep. Sep. Sep. Sep. Sep. Sep. Sep
TRA	Clutch Type	MAN SERVICE SE
	Janition Current Source	NAME OF THE PROPERTY OF THE PR
EL	Fuel Feed	Vac Vac
FUEL	Carburetor Make	Sol
OIL SYS- TEM	Pressure Lb.	0 abc. 0
	Cooling	44444400000000000000000000000000000000
-F	Drive	######################################
CAM- SHAFT	Lecation	900 00000 00000 0000000000000000000000
	Piston Material	1000000000000000000000000000000000000
9:	Cylinders and Crankcas	2
	Valves Lecation	
(.nl .u.)	Piston Displacement (Compression Ratio	
	.sul	1
BORE AND STROKE	-w w	010 010 000 414 900 000 000 000 000 000 000 000 000 00
	Number of Cylinders	4 60×10 6 65×10 6 65×10 6 65×10 6 60×10 6 60×10 6 60×10 6 60×10 6 60×10 6 60×10 6 60×10 6 60×10 6 70×10 6 70×10 6 70×10 6 80×10 6 80×10 8 8
	(.snl) səuT	27x4 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Track (Ins.)	45 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	Wheelbase (Ins.)	111121 11121 11121 11121 11221 122
	.9.н	9235238835-238284232288888835223210-2288888825252448892868352448888888888888888888888888888888888
	NAME	A. J. S. Atvis. Atvis F. W. D. (a) Armatron Siddeloy Armatron Siddeloy Armatron Siddeloy Armatron Siddeloy Armatron Siddeloy Attain Attain Austin Aus

1680 1290 1450 1450 1450 1900 1900 1900 1900 1900 1900 1900 19	1
Wire-Wire-Wire-Wire-Wire-Wire-Wire-Wire-	Above or below Steering Wheel Thermo Siphon Organe Tube
WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	or below 8
Vac. 1	Above or Wheel Thermo S. Torque Tu
	SW—AB W ThS—TI TT—TO
ІР — ІВ —	- N FFF
	[eaid
	- Email
20020000000000000000000000000000000000	Plan—Planetary R—Right Hand RR—Radius Rods Sop—Separate Son—Separate Revel (Final Drive)
\$\\ \frac{\text{SQ}}{\text{QQ}} \\ \frac{\text{QQ}}{\text{QQ}}	Planetar light Hand Radius Re- Separate
111111111111111111111111111111111111111	Sep
The second of th	-
1. Mat. 1. Mat	
<u>රට්ට්ට් ස්ස්ට්ට්ට්ට්ට්ට්ට්ට්ට්ට්ට්</u> ස්ස්ස්ස්ස්ස්ට්ය්ස්ස්ට්ට්ට්ට්ට්ට්ට් අත තත තත තෙන අත තත තත තත තත තත කත තත තත තත තත තත තත ත	Steel
Bragary Bragar	Helical Gear Hollow Pressed Steel Hydraulic Hypoin Press
<u> </u>	Helical Gear Hollow Press Hydraulic Hypoid
MARBER MERCHEN MEN MEN MEN MEN MEN MEN MEN MEN MEN M	Hel Hyd
Grav. Vac. Vac. Vac. Vac. Vac. Grav. Pump Pump Pump Pump Pump Pump Pump Pump	
Ama Own Own Own Own Own Own Own Own Own Own	Builing
30 above 45 ab. 45 ab. 30 aborde 30 aborde 30 aborde 25 above 25 above 27 above 28 above 38 above 58 abov	end gears or chain (Olling stem) entric entric
<u> </u>	t end gears or ystem) centric uarter-elliptic
######################################	e—Front end ges System) Ecc—Eccentric MEI—Quarter-el
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14.6.	
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ರಾಣರಾಣಕುತ್ತು ಕಾರಾಣಕಾಗಿ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕ್ಕಿ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕ್ಕಿ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕ್ಕಿ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕ್ಕಿ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕ್ಕಿ ಕಾರ್ಲಿಕ್ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕ್ಕೆ ಕಾರ್ಲಿಕ್ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಣಕ್ಕೆ ಕಾರ್ಲಿಕ್ ಕಾರ್ಣಕಾಗಿ ಕಾರ್ಲಿಕ್ಕೆ ಕಾರ್	_ =
220 220 220 220 220 220 220 220 220 220	ystem) s (Oilir
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	—Big-ends (Oiling System) —Battery ew—Bevel —Camabaft Bearings (Oiling
4 [60x100 4 [60x100 60x100 6 [60x100	b—Big-end B—Battery Bev—Bevel c—Camshal
4400040004400000000004400404000000000	
28x4.75 27x4.4 27x4.4 23x4.7 23x4.7 23x6.0 23x6.7 23x6.0 2	<u> </u>
24452555555555555555555555555555555555	Super-
1111 1120 1120 1120 1120 1120 1120 1120	Front Wheel Drive, Steharged Charged Superbarged Speed Model Engine at Reer Principal
200505050505050505050505050505050505050	Wheel cywheel Cywheel Cywheel Cymreed Spe
	Front Websited Charged Fluid Flys Supercharges
O O O O O O O O O O O O O O O O O O O	(a) Fro
Ribode Riley Riley Riley Riley Riley Riley Rolls Royce Rolls Royce Rover Rover Rover Rover Rover Singer Tribot Tribumph Tribot Tritumph Tritum	0 033
	1

ep—Separate

——Separate

pr—Spring Breyel (Final Drive)

pr—Springs (Propulsion & Torque)

pr—Mechanical Servo

pr—Sleeve Valves

pr—Spur Gears Plan—Planetary R—Right Hand RR—Radius Rods ernal Four Wheels ernal Rear Wheels ernal Transmission s at Side rneto and Battery Itiple Dry Plate Hel—Helical Gear HS—Hollow Pressed Steel Hyd—Hydraulic

Cant—Cantilever
CC—in Crankcaseo
Ci—Cast Iron
Ci&—Cast Iron and Aluminum
Ch—Chain
Ch—Chain
Ch—Chain
OM—Direct Mechanical

a—Main Bearings (Oling System)
Al—Aluminum
Al—Auminum and Steel
AP—Auto-pulse Pump
Ama—Amac

ABBREVIATIONS

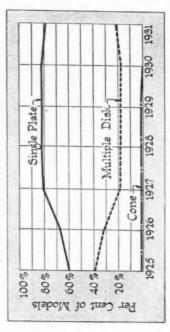
charged (b) Fluid Flywheel Optional
(c) Fluid Flywheel Optional
(d) Engine at Rear, Friction Disk
Transmission, Double Reduction Growther Reduction Growther Reduction Geor in Rear Wheels

Engine Piston Material Used Per Cent of Models Using Each; Data p. 326

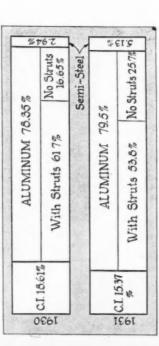
Ths—Thermo Siphon
TT—Torque Tube
TA—Torque Tube
TA—Torque Arm
TA-£ed—Transverse half-elliptic
V—Valvelees Two-cycle Engine
Vac-Vacuum Servo

We—Worm
WN—Worm and Nut
WS—Worm and Sector
WW—Worm and Wheel
Zen—Zenith

Clutch Types Used



Passenger Car American



CONTINENTAL PASSENGER CARS

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	-	Piston Displacement Cubic Inches	
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		Bore & Stroke mm.	66x110 66x10 66x80 66x80 66x80 66x80 66x90 66x90 66x90 73x109 73x109 66x10 73x109 66x10 73x109 66x10 73x109 73x100
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		Piston Displacement Cubic Inches	304	449 156 241	101	2228861	12001	171 363 409	177	118 178 178 236	234	313	150	12001	120	156	210	280	382	475	428 33 60 45.7		
		Bore & Stroke inches	22x4	3.74x5.11 3.23x4.72 3.11x3.93	40m9 K4	48x3.7 67x3.93	59x3 14 71x3 14 67x3 62	2.95x4.4 3.74x5.5 2.95x4.4 3.54x5.1	1x4.5	95x4.33 95x4.33 95x4.33	44x5	.44x5	91x3.78	91x3.78 91x3.78 03x4.37	.56x3.93	.95x3.93	.15x4.52	.15x4.52	7x5.9	74x5.31	93x5.9 91x2.67 67x2.68 16x3.11	48x3.46 36x4.01 99x4.72 06x4.33	74x4.49 87x4.64
		Bore & Stroke mm.	82x118 3	95x130 3 82.5x120 3 79.3x100 3	00-69	63x94 63x94 68x100 72x100	66x80 69x80 68x92 2222	75x112 95x140 75x112 90x130	74.6x1113	75x 110 75x 110 75x 110 75x 110	120.653	00.00	0 00 00	CO CO CO E	63	75x100 2.	80x115 3.	80x115 3.	94x115 3.	95x135 3.	100x150 3. 74x68 2. 68x68.5 2. 55x79 2.		
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		Wheelbase (Ins.) Tread (Ins.)	146.57	145 56 134 56 137 57	*	191119	115 50 115 50 119 56	123 59 149 57 143 59 153 59	130 57	112 53 117 53 123 53 130 56	122 58	43 57 57	75 40 12 53	20 20 22 20 20 20 20 20 20 20 20 20 20 2	111 56	110 56	126 56	145 58	48 56	48 59	34 56 02 43 06 46 90 39	97 47 32 56 36 56	200 00
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AMERICAN GASOL

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ABBREVIATIONS

"Others furnished

"At extra cost

"Gas Electric

"Prices on application

1930 Specifications

"Main Bearings

ABes—American Bosch

Air—Air Boscher

AL—Auto-Lite

Alm—Almetal

AP—Air Pressure

Lower Rod Bearings

B—Battery (Ignition)

B—Balloons (Tires)

Bal—Ball and Ball

BM—Battery and Magneto
B&B—Borg & Beck
BC—Evel Gear
B-L—Brown Lipe
Ble—Blood
B-PS—Bevel Pinion and Sector
c—Cambaft Bearings
C&L—Cam and Lever
Cad—Cadillac
Ca—Carrifugal
Cla—Clark
Cla—Cleveland
Cel—Columbia
Cont—Continental
Cot—Cotta
Cov—Covert

d—Dual
d—(Oiling System)—Wrist Pins
Day—Dayton
D-C—Disk Cast Steel
DD—Dead
D-Dead
D-D-Disk Drive Shaft (Brakes)
DS—Dual Solid
DeJ—DeJon
Del—Delco
Det-Detroit
Dir—Direct
DP—(Clutch)—Double Plate
DR—Double Reduction
Dtl—Detlaff
e—Gear Case

Eat—Eaton
E-Da—External Drive-shaft
E-Fw—External Four Wheel
Eis—Eisemann
Eng—Engine
E-P—Electric Pump
E-M—Eric Mall
E-Rw—External Rear Wheela
E-T—External Transmission
Exi—Exide
i—Rocker Arm Shaft
3/6F—Semi-Floating
3/6

FF—Full Floating
Ful—Fuller
Ful—Fuller
Fw—4-Wheel
G—Gravity
GE—General Electric
Gem—Gemmer
Han—Handy
Hann—Hannum
HaS—Hall Soott
Heli—Helical
Here—Hercules
H-V—Hydraulic Vacuum Booster
Hyd—Hydraulic
Hyp—Hypoid
I—In Head

INE BUS CHASSIS





SSION					RE	AR A	KLE				BRAKE	S			SPR	INGS				RUN	NING (GEAR	1		
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Io—In Head: overhead camshaf
I-Ds—Internal Driveshaft
I-Fw—Internal Four Wheel
IG—Internal Gear
Ind—Indestructible
I-Rw—Internal Rear wheel
Jac—Jacox
L—L Head
L-N—Lecce Neville
Lyc—Lycoming
M—Magneto (Ignition)
MI—Metal (Shackles)
Mal—Malleable Iron
MD—Double Disk
MDD—Multiple Dry Disk

M&E—Merchant & Evans
Mec—Mechanical
Met—Motor Wheel
M-P—Mechanical Pump
Mun—Muncie
N-E—North East
N-P—No Provision
N&L—Nuts and Lever
Opt—Optional
P—Presumatic (Tires)
P—Pressure (Fuel Feed)
Pic—Pick
Pew—Power Operated
Pre—Prestoite
R—Rubber

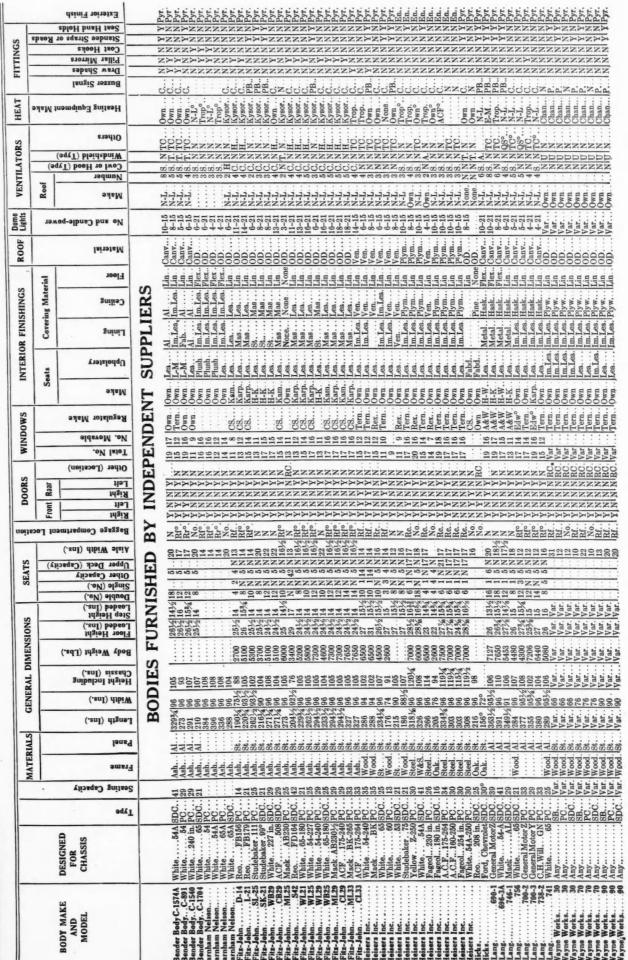
RA—Wheels Swung from Radius
Arms
RBos—Robert Bosch
RwDs—Rear wheels & drive shaft
S—Solid
SB—Spiral Bevel
S-C—Spoked Cast Steel
Sch—Schobler
Sch—Schobler
SeU—Separate Unit
Shu—Shuler
Siber—Siberling
S&L—Screw and lever
SI—Sleeve Valve
S-M—Spoked Malleable Iron
Smi—Smith

S&N—Screw and Nut
SP—Single Plate
SP—Single Plate
SP—Spicked Prensed Steel
Spi—Spicer
Spi—Spiked Steel Dink
Str—Stromberg
Sw—Suction
S-W—Spoked Wood
I—IT Head
IB—Straight Bevel
Tim—Timken
Uni—Universal Machine
UnFA—Unit with Front Axie
U-P—Universal Products

/--Vacuum
/ac-Vacuum
/ac-Vacuum
/ar-Various
Nar-Warner Corp.
Nauk-Waukesha
Nes-Westinghouse
N-G-Warner Gear
Willard
Nisc-Wisconsin
Ne-Worm
M&R-Worm and Roller
N&S-Worm and Sector
W&W-Worm & Wheel
Lan-Zenitk



AMERICAN BUS BODIES

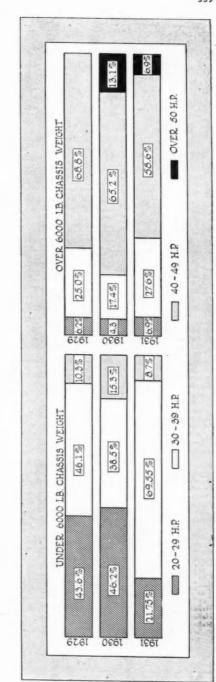




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Sup—Superior Body Co.
T—Through Cowl
T.C.—Top of Cowl
Tern—Ternstedt
Trop—Tropic Air
TWO—Through Windshield Wood and Steel R-Right Rc-Under Rear Compartment RCF—Rubber Center RCF—Rubber Coated Fabric RiC—Right Center hyde r and Fabrikoid Inoleum
Leather or Mohair
Masonite
-Metal and Fibre

ABBREVIATIONS:



U. S. Bus Engine Trends



BRITISH MOTOR

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MAKE	Seating Capacity	Chassis Only (Lbs.)	Body Maximum (I he)	Ibase	Tread Rear Wheels (Ins.)	Front (Ins.)	Rear (Ins.)	Number of Wheels	Number of Cylinders Bore and Stroke (Ins.)	Valve Arrangement	Carburetor Make	Fuel Feed	Ignition Type	Clutch Type	Location	Number of Forward Speeds	Туре	Final Drive	Total Reduction R High Gear	Location	Operation	Frame Height (Ins.)	Length (Ft. and Ins.)	Width
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ABBREVIATIONS

Air—Compressed Air (Brakes)

B—Battery
Cla—Claudel
Ce—Cone
C&P—Cone and Plate
d—Dual
DM—Direct Mechanical
DP—Double Plate
DR—Double Reduction
Eng—Unit with Engine
F—In Head and Side

FF—Full Floating

4/FI—Semi-Floating

4/FI—3/4 Floating

4/FI—3/4 Floating

Fw—Four Wheels

G—Gravity

Hyd—Hydraulie

I—Valve in Head

IG—Internal Gear

L—"L" Head

M—Magneto

MD—Multiple Disk

Mech—Mechanical

Opt—Optional
P—Pneumatic
Pe—Fump
Rw—Rear Wheels Only
4RW—Four Rear Wheels
S—Solid
Sep—Separate Unit
Ser—Mechanical Servo
SI—Sleeve Valve Type *
Smi—Smith
Sel—Solex
SP—Single Plate

Sp—Spiral Bevel
Sw—Six Wheels (Braking)
T&FW—Transmission and Four
Wheels
T&Rw—Transmission and Rear
Wheels
V—Vacuum
Vac—Vacuum
Servo
Wo—Worm
Zem—Zenith
†—Gas Electric
*—Driver Beside Engine

BUS CHASSIS



					GE	NERAL				ENG	INE			TRAN	SMISS	ION	RE	AR AX	LE	BRAB	ES	DIN	MENSI	IONS
		Wei	ght			Tire	s Type I Size		s (*s		Fue Syste				Gear	set			tio				Ove	erall
MAKE	Seating Capacity	Chassis Only (Lbs.)	Body Maximum (Lbs.)	Wheelbase (Ins.)	Tread Rear Wheels (Ins.)	Front (Ins.)	Rear (Ins.)	Number of Wheels	Number of Cylinders Bore and Stroke (Ins.)	Valve Arrangement	Carburetor Make	Fuel Feed	Ignition Type	Clutch Type	Location	Number of Forward Speeds	Туре	Final Drive	Total Reduction Ratio	Location	Operation	Frame Height (Ins.)	Length (Ft. and Ins.)	Width (Fe. and Inc.)
hornycroft. hornycroft. hornycroft* hornycroft* hornycroft* hornycroft hornycroft Fhornycroft S. S. S. S. S. S. S. S. S. S. S. S. Wulcan Vulcan	24 28 32 52 52 26 40 68 30 32 40 20 26 26 32 50 26 32 36 36 36	6700 7480 7280 7500 6620 9450 9550 6385 6620 7060 11760 5377 4700 5490 7840 7840 7840 6500	3250 4330 4590 4550 3585 5 3585 5 240 0 2910 0 2920 0 3920 0 3920 0 3920 0 3920 0 4880 0 4	198 198 198 180 216 192 216 192 225 192 204 125 181 181 181 198 198 198 198 198 198 198	76 76 76 66 75 74 74 74 75 63 63 63 78 75 68	36x8 36x6 36x7 36x7 36x7 36x7 36x8 36x8 36x8 36x6 32x6 32x6 32x6 32x6 32x6 36x8 36x8 36x8	36x8 36x6d 36x7d 36x7d 36x7d 36x7d 34x7 36x8 36x6d 36x6d 32x6d 32x6d 32x6d 32x6d 32x6d 32x6d 36x6d 36x6d 36x6d 36x6d 36x6d 36x6d 36x6d 36x6d 36x6d 36x6d 36x6d	444444444444444444444444444444444444444	6-384x514 6-416x514 6-416x514 6-416x514 4-434x6 6-384x514 6-486x514 6-486x514 4-414x515 4-414x515 4-414x516 6-314x516 6-314x516 6-314x516 6-316x516	L L L L L L L L	Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen.	V. V. V. V. V. V. V. V. V. V. V. V. V. V	M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.	SP. SP. SP. SP. SP. SP. SP. SP. SP. SP.	Eng. Eng. Eng. Eng. Eng. Eng. Eng. Eng.	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1/2FI 1/2FI	Wo. Wo. Wo. Wo. Wo. Wo. Wo. Wo. Wo. Wo.	8.25 8.25 7.75 8.25 8.25 5.75 5.75	Fw. Fw. Fw. Fw. Rw. Rw. Rw. Rw.	Vac Vac Vac Vac DM DM DM Air Vac Vac	24½ 24½ 32½ 25½ 25½ 29½ 25 31 25 21 21 21	23-9 25-9 25-9 25-9 28-11 28-11 25-3 26-0 27-1 30-0 19-8 19-8 23-1 23-1 25-9 23-1 23-1 23-1 23-1 23-1	6-7-5 7-5 7-5 7-6 7-3 7-1 7-1 7-1 7-1 7-1 7-1 6-3 6-3 7-1 7-1

ABBREVIATIONS
Air—Compressed Air (Brakes)
B—Battery
Cla—Claudel
Co—Cone
C&P—Cone and Plate
d—Dual
DM—Direct Mechanical
DP—Double Plate
DR—Double Reduction
Eng—Unit with Engine
F—In Head and Side

FF—Full Floating

2/FI—Semi-Floating

2/FI—3/4 Floating

3/FI—3/4 Floating

Fw—Four Wheels

G—Gravity

Hyd—Hydraulic

I—Valve in Head

IG—Internal Gear

L—"L" Head

M—Magneto

MD—Multiple Disk

Mech—Mechanical

Opt—Optional
P—Pneumatic
Pu—Pump
Rw—Rear Wheels Only
4RW—Four Rear Wheels
S—Solid
Sep—Separate Unit
Ser—Mechanical Servo
SI—Sleeve Valve Type
Smi—Smith
Sol—Solex
SP—Single Plate

Sp—Spiral Bevel
Sw—Six Wheels (Braking)
T&FW—Transmission and Four
Wheels
T&Rw—Transmission and Rear
Wheels
V—Vacuum
Vac—Vacuum Servo
We—Worm
Zen—Zenith
†—Gas Electrie
*—Driver Beside Engine

CONTINENTAL BUS CHASSIS

МАКЕ	Seating Capacity	Wheelbase (Ins.)	Track (ins.)	Tires Front	Tires Rear	No. of Wheels	No. of Cylinders Bore and Stroke	Valve Arrangement	Carburetor Make	Fuel Feed	Ignition Type	Clutch Type	Gearset Location	No. Foward Speeds	Final Drive	Brakes (Fest)	Brakes (Hand)	Steering Type	Wheels Type
							FRE	NC	Н										
Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Berliet Bernard Cottin-Desgouttes Delahaye De Dion Bouton Lafily Lafily Panhard-Levassor Renault Renault Renault Saurer Saurer Somua	10 10 16 20 50 35 30 60 20 35 35 35 25 30 22 30 22 30 25 30 30 35 35 35 35 35 35 35 35 35 35 35 35 36 36 36 36 36 36 36 36 36 36 36 36 36	135 135 150 182 223 183 213 213 213 214 195 181 204 176 168 177 196 161 196 162 170 196 196 196 196	58 58 68 74 73 69 71 74 78 67 73 65 64 63 74 64 68 70 67 73 65 65	P 30x5 P 30x5 P 30x5 P 35x135 P 32x6 P 38x7 P 38x7 P 38x7 P 36x8.25 P 38x9 P 36x8.25 P 38x9 P 36x7 P 34x7 P 34x7 P 34x7 P 33x7 P 32x6 P 1025x185 P 30x7 P 30	P 32x6 P 32x6 P 32x6d P 32x6d P 38x7d P 38x7d P 38x7d P 38x7d P 38x7d P 36x8.25d P 36x7d P 36x8.25d P 36x7d P 35x155d P 955x155d P 955x155d P 93x7d P 34x7d P 34x7d P 34x7d P 34x7d P 36x8.25d P 93x7d P 36x7d P 36x7d	444444444444444444444444444444444444444	1-4, 33x5, 51 6-4, 33x5, 51 6-4, 33x5, 51 6-4, 33x5, 51 6-4, 33x5, 51 6-4, 33x5, 51 6-3, 22x4, 5 6-3, 22x4, 5 6-3, 25x5, 6 6-4, 13x5, 51 6-3, 54x5, 11 6-3, 54x5, 11 6-4, 54x5, 51 6-2, 55x5, 11 6-3, 54x5, 51 6-4, 35x5, 6 6-4, 35x5, 6 6-4, 33x5, 6 6-4, 33x5, 6 6-4, 33x5, 90 6-4, 33x5, 90	L L L L L L L L L L L L L L L L L L L	Zenith Solex Solex Zenith Solex Solex Solex Solex Own Own Own Own Own Own Claudel Claudel Solex Solex Solex Own Own Own Own Own Own Own Own Own Own Own Claudel Solex Solex	Vac Vac Vac Vac Vac Vac Vac Grav Grav Grav Grav Grav Uac Grav Grav Grav Vac Pump. Pump. Pump. Grav. Grav.	Bat. Bat. Mag Mag Mag Mag Mag Mag Mag Mag Mag Mag	MD. MD. MD. MD. MD. MD. MD. MD. MD. MD.	Sep. Sep. Sep. Sep. Sep. Sep. Sep. Sep.	444444444444444444444444444444444444444	Sp IG	IFR. IFR. IFR. IFR. IFR. IFR. IFR. IFR.	IR. IR. IR. IR. IR. IR. IR. IFR. IFR. IF	WS. WS. WS. WS. WS. WS. WS. WS. WS. WS.	D
							BEL	SIA	N										
Brossel. Miesse. Miesse Miesse Miesse* Minerva Minerva Minerva	40 30 40 68 15 25 30	216 182 207 210 169 190 214	75 69 78 80 68 68 69	P 38x9.75 P 40x10.5 P 40x10.5 P 40x10.5 P 36x6 P 38x8.25 P 38x7	P 38x9.75d P 40x10.5 P 40x10.5 P 38x7d P 36x6d P 38x8.25d P 38x7d	4 6 4 4 4	6-4.13x5.11 8-3.14x5.11 8-3.14x5.11 4-3.14x5.11 4-3.54x5.51 6-3.74x5.51 6-3.74x5.51	I I Si	Zenith Zenith Zenith Zenith Zenith Zenith Zenith Zenith	Vac Vac Pump. Pump. Pump.	Bat Bat Mag. Mag	MD SP SP SP MD MD MD	Eng Eng Eng Eng Eng Eng	4 4 3 4 4 4	Wo Sp Wo Sp Sp Sp	IFR IFR	IR IR IR IT IT IT	SN SN CL	D D D D D

^{*}Miesse, two engines



CONTINENTAL BUS CHASSIS—Continued



MAKE AND MODEL	Seating Capacity	Wheelbase (Ins.)	Track (ins.)	Tires Frent	Tires Rear	No. of Wheels	No. of Cylinders Bore and Stroke	Valve Arrangement	Carburetor Make	Fuel Feed	Ignition Type	Clutch Type	Gearset Location	No. Forward Speeds	Final Drive	Brakes (Foot)	Brakes (Hand)	Steering Type	Wheels Type
eirano	50	185		P 36x8	P 36x8d			L	Zenith	Vae		SP	Eng	4	DR	IFR	IT	WW.	D
iat iat ancia	18 100 46 27	149 224 233 177	77 73	P 30x5 P 38x9 P 985x205 P 34x7	P 30x5d P 38x9 P 985x205 P 34x7d	6 4 4	6-2.83x4.0 6-4.52x5.3 6-3.93x5.90 4-3.93x5.51		Solex Solex Zenith Zenith	Vac	MB Mag	MD SP SP MD	Eng Sep Eng Eng	4 4 4	Wo Wo Sp DR	IFR IFR IFR	IR IT IR IT	WS WS WS	D CS D
							GER	MA	N										
rennabor	15 30	156 216	56 75	P 32x6.75 P 38x9	P 32x6.75 P 38x9d	4	6-3.03x4.37 6-4.52x5.9	Į	Solex Zenith	Vac	Mag.	Co	Eng Sep	4	Sp DR	IF	ET	WS	CS.
uessing-N A G50N uessing-N A G80N uessing-N.A.G508	40 45/85 20	240 283 161	80 79 71	P 38x9.75 P 44x12 P 6.5x20	P 38x9.75d P 44x12 P 6.5x20d	6 4	6-4.52x5.9 6-4.92x6.3 4-3.54x4.92	Ĭ	Zenith Buessing Sum	Vac	Mag Bat	Co SP	Sep Sep	4 4 3	DR	IF	ET. IMR. IR.	WS	CS CS D
uessing-N.A.G 511 aimler-Benz, Mercedes O-2500	25 21	177	71 63	P 7x20 P 7x20	P 7x20d P 7x20d	4	6-3.3x4.72 6-3.15x5.11	L	Pallas	Vac Grav		SP	Eng	4	_			SN	-
aimler-Benz, Mercedes O-3000	24	177	68	P 7.5x20	P 7.5x20d	4	6-3.23x5.11		Solex	Pump.		SP	Eng	4	Sp	IF	IR	SN.	. D
O-4000 Mercedes	33	226	69	P 40x8	P 40x8d	4	6-4.13x5.9	L	Pallas	Pump.		MD		4				SN	
Diesel aimler-Benz, Mercedes Diesel	33 49	226 275	69 76	P 40x8 P 10.5x20	P 40x8d P 10.5x20	6	6-4.13x6.49	I	Diesel.	Pump.		MD		4		IF		SN	
O-8500	49	275	76	P 10.5x20	P 10.5x20	6	6-4.13x5.9	L	Pallas,	Pump.	Mag.	MD		4	DR	IFM	IM.	SN	. CS.
aun (Gas-Electric) aun	25° 34 23	202 226 165	71 76 62	P 38x7 P 9.25x20 P 32x6	P 38x7d P 9.25x20d P 32x6d	4 4	6-3.7x6.61 6-3.7x6.61 4-3.74x5.51	Ĭ L	Solex Orkan.	M.Pu	MB. MB. Bat	SP MD	Eng Sep.	4	DR	IF IF ET	IR IR	SN	. CS.
enschel	28 22-50	193 233 293	62 70	P 34x7 P 9.75x20	P 34x7d P 9.75x20d	4	6-3.93x4.92 6-4.72x6.3		Zenith Pallas	Vac	Mag	SP MD MD	Eng Sep Sep	4	Sp DR	IF	IR. IMR.	WS	CS.
lenschel 35F3 rupp 04N rupp 05N62	33	227 236	78 77 67	P 12x20 P 38x9 P 40x10.5	P 12x20 P 38x9d P 40x10.5d	4 4	6-4.92x6.3 6-3.93x6.3 6-3.93x6.3	I	Solex	Pump	Mag	SP	Eng.	4	DR	IF	IR	SN	CS. CS.
ey. V14L	18	224 177 157	78 59 63	P 44x12 P 7x20 P 7x20	P 44x12 P 7x20d P 7x20d	6	6-5.11x6.3 6-3.15x4.72	L	Solex Solex Pallas	Grav. Vac.	Mag Bat Mag	SP SP	Sep. Eng.	3 4	Sp DR Sp	IS IF	IR ET IR	WS.	. D.
Magirus M20 Magirus M20 Magirus M40	34	167 177	63 67	P 7x20 P 34x7	P 7x20d P 7x20d P 34x7d	4 4	6-3.34x4.92 6-3.46x4.92 6-3.74x5.31	L	Zenith	. Vac	Mag. Mag.	SP MD	Eng.	4	Sp DR	IF	IR	SN.	. D.
Magirus M50	37	238 218 224	76 73	P 38x9 P 40x8 P 9.75x20	P 38x9d P 40x8d P 9.75x20d	4	6-3.7x6.61 6-4.33x5.9 6-4.33x6.49	I	Pallas.	Vac	MB	MD Co MD	Eng.	4	DR DR	IF	IR IR IR	WS.	CS.
M.A.N F1No M.A.N 6-whO d.d Nacke		270 161	73 78 64	P 10.5x20 P 32x6	P 10.5x20 P 32x6d	6	6-4.72x7.08 4-4.52x5.9		Pallas.	Vac	Mag. Mag.	MD.	Sep.	4	Wo	IF	IR	WS.	CS.
Vacke VackeDC	25 35 50	165 177 276	64 67 76	P 34x7 P 40x8 P 40x10	P 34x7d P 40x8d P 40x10	4	4-4.52x5.9 6-4.52x5.9	L	Pallas. Pallas. Zenith.	. Vac	Mag.	Co Co	Sep.	4	Wo DR	ET	IF IF IMR.	SN.	D.
omag60V5	40	224	72	P 38x9.75	P 38x9.75d	1 4	6-4.72x6.3	i	Zenith	. Vac	Mag.	. Co	Sep.	5					C8.
ustro-Fiat AFN 1	18	141	63	P 7x20	P 7x20	1 4	AUST	-		.IVac	.iMag.	SP	Eng.	. 4	Sp	IF	IR	ws.	D.
Austro-Fiat O2: Austrian Saurer . 2BH-N	26 21	189 157	71 61	P 8.25x20 P 32x6	P 8.25x20d P 32x6d	4	4-4.13x5.9 4-3.93x5.9	L	Zenith.	Vac.	Mag.	SP	Eng.	: 4	Sp	IF	IR	WS.	D.
Austrian Saurer 3BH-N Austrian Saurer 3BN-N Austrian Saurer 5BL-N	30	196 196 228	68 68 73	P 34x7 P 34x7 P 40x8	P 34x7d P 34x7d P 40x8d	4	4-3.93x5.9 6-3.93x5.11 6-4.33x5.9		Saurer Saurer Saurer	Grav. Grav.	Mag.	SP.	Eng Eng Eng	1		IF	IR IR IR	WS. WS. WS.	
ross-Buessing. W IV (32	220 196	72 67	P 9.75x20 P 8.25x20	P 9.75x20d P 8.25x20d	1.4	4-4.52x5.9 6-3.93x6.69		Pallas Pallas Maybac	. Grav.	. Mag.	. Co SP	Sep.	4	Sp	IF	IR	WS.	CS D
ross-Buessing IV FB Graef & Stift V Graef & Stift	23	204 145 178	79 59 63	P 40x8 P 34x7.5 P 36x8.25	P 40x8d P 34x7.5d P 36x8.25d	1 3	6-3.76x6.6 4-3.54x5.5 4-4.13x5.9	L	Zenith.	. Grav.	. Mag.	Co	Sep. Sep. Eng.	4	Sp	IF EF	IR IT ET.	SN.	CS D.
erl L60	17	141 159	57 61	P 30x5 P 34x7	P 30x5d P 34x7d	4	6-2.87x4.72	L	Strom	Grav.	Bat	MD	Eng.	: 1	Sp	IF	ET.	SN.	D
erl L600 Perl D Steyr XII I	1 26	159 130 130	63 59 50	P 34x7.5 P 32x6 P 30x5	P 34x7.5d P 32x6 P 30x5	1		5 L	Strom. Strom. Zenith. Pallas.	Pump Pump Grav	Bat	SP.	Eng Eng Eng		Sp	IF	ET.	SN. SN.	CS
v.A.F. XVI	Var.	145 173	63 74	P 34x7 P 36x8	P 34x7d P 36x8d	1 4	6-3.46x4.3 4-4.13x6.2	3 I	Pallas. W.A.F.	Vac.	Mag. Mag	MD.	Eng.	. 4		IF	IR.	SN. WS.	D.
					CZ	EC	CHO-SL	OVA	KIAN										
Praga	Var	134	54 59	P 6x20 P 36x6	P 6x20d P 36x6d		4 4-2.85x4.3 4 4-3.54x5.9	3 L	Zenith. Zenith. Zenith.	Grav	Bat.	. SP	Eng.		DR	ET	IR.	WS.	D.
Praga Fatra 2 Fatra 4	Var	161 131 130	67 55 59	P 38x7 P 30x6.5 P 28x5.5	P 38x7d P 30x6.5 P 36x8.25	1	4 4-4.33x6.3 6 4-2.95x3.7 4 4-2.95x3.7	4 L	Zenith.	Grav	Mag.	MD.			4 DR 8 SwA/S _I 4 SwA/S _I	ET IS	IR.	SN.	D
Tatra	7 22 3 24	173 156	67	P 36x6 P 40x10.5	P 36x6 P 40x10.5	1	4 4-3.74x5.9 4 4-4.52x7.0	8 I	Zonith	Grav	Bat. Mag	. MD.	Eng.		4 SwA/Si 4 SwA/Si	IF	ET.	SN.	CS
Гаtra 2 Гаtra 58/2 Walter	4 31 4 31 20	189 189 126	71 71 55	P 40x10.5 P 40x10.5 P 7x20	P 40x10.5 P 40x10.5 P 7x20		6 4-4.52x7.0 6 6-4.52x7.0 4 4-2.95x4.2	8 I	Zenith.	Grav Grav Vac.	Mag. Mag. Bat.	. Co		3	8 SwA/S ₁ 8 SwA/S ₁ 4 Sp	. IF	ET. ET. IR.	SN. SN. WW	CS
Walter Walter Walter	18 26	141 189	57 68	P 30x5 P 8.25x20	P 30x5d P 8.25x20	1	4-2.93x4.2 4-3.34x4.9 4-4.13x5.9	2 L	Zenith.	Vac.	Mag	SP.,	Eng.		4 Sp 4 Sp	IF	IR	WW	. D

ABBREVIATIONS:
Bat—Battery
Be—Bevel
C&L—Cam and Lever
Co—Cone
CS—Cast Steel
d—Dual

D—Diak
DR—Double Reduction
EFR—External Front and Rear
Eng—Unit with Engine
ET—External Transmission
F—"F" Head
Grav—Gravity

I—Valve in Head
IF—Internal Four Wheels
IFR—Internal Front and Rear
IFRT—Internal Front Rear
and Transmission
IFT—Internal Front and Trans.
IMR—Middle and Rear
IR—Internal Rear
IS—Internal Six Wheel
IT—Internal Transmission
I—"L" Head
Mag—Magneto
MB—Magneto and Battery

MD—Multiple Disk
M. Pu—Mechanical Pump
P—Pneumatic
SN—Screw and Nut
SP—Single Plate
Sp—Spiral Bevel
Strom-Strombers

SwA—Swinging Axle Vac—Vacuum Var—Various Wo—Worm Drive WS—Worm and Sector WW—Worm and Wheel



AMERICAN GASOLINE TRUCK CHASSIS



			TIRE :	SIZE		ENGINE			FUE		Elect Syst		Make			REAR AXI	LE	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Front	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carbureter Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and M	Gearset, Make and Model	Universals, Make and Number	Make and Model	Final Drive and Type	Front Axle, Make and Model
1000 Pounds Chevre'et Ind. Com. Dodge Bres UF-10 Dodge Bros F-10 Farge Packet Ford A (X) Gen. Mot. T11 Ree Jr. 15 Rugby 614 Studebaker S1 Whippet 964 Willys Six 988	595 345 625 785	109 109 103 109 115 114 103	B 5.00/19 B 5.25/19 B 5.00/19 B 4.75/19 B 6.00/18 B 6.00/18 B 5.00/19 B 5.25/19 B 4.75/19	B 5.00/19 0 B 5.25/19 0 B 5.00/19 0 B 4.50/20 0 B 5.50/19 1 B 6.00/18 0 B 5.25/19 0 B 4.75/19 0	OwnOwnOwn A Own A Con 19E Con 22-A Own 96A	6-354x334 4-35x434 6-35x414 6-35x434 6-354x336 6-354x4 6-354x4 6-354x4 6-354x4 6-354x4 6-354x336	26.3 21.0 23.4 23.4 24.0 26.3 27.3 25.3 21.3 15.6 25.3	40-3200	Car Str Zen Mar Sch Str Str	M. V. G. M. P M. V.	D-R. N-E. Own. D-R. D-R. A-L. A-L.	D-R. D-R. Own. D-R. D-R. A-L. A-L.	P.Own. P. B&B. P.B&B. D.Own. D.Own. P.Own. P.B&B. P.B&B. P.B&B. P.B&B.	Own Own Own Pontiae W-G W-G Own	Own 2 U-P 2 Own Own Spi Spi 2 M.M. 2 M.M. 2	Own Int. Own Own Own Own Pontiac. Sal. Adams Own Own	S1/2. S1/2.	Own Ind Own Own Pontiac Sal Adams. Own Own Own
1500 Pounds Dodge Brothers Dodge Brothers Dodge Brothers Dodge Brothers Fargo Clipper Fisher Standard Jr. B. (X) Gen. Mot. T 15. International. Spec. De International. AW-I Paige. Relay. 15AA	860	124 124 124 120 125 130 124 136	P 30x5 B 5.50/20 P 30x5 B 5.50/18 B 5.50/20 B 5.50/20 B 5.50/20 B 5.25/20 B 5.25/20 B 5.50/19	P 30x5 B 5.50/20 P 30x5 B 5.50/18 P 30x5 P 30x5 B 5.50/20 B 5.25/20 B 5.25/20 B 5.50/19.	Own	4-356x414 4-356x414 6-336x336 6-336x336 6-336x414 4-376x414 6-336x4 4-326x416 4-346x416 6-336x4	21.0 21.0 27.3 27.3 23.4 24.0 27.3 26.3 19.6 25.3 27.3	45-2800 63-3200 63-3200 48-2800 60-2800 58-3000 30-2700 76-3400	Car Zen Str Zen Zen Zen Zen Zen Zen	V V V V V V V V	D-R. N-E D-R. A-L. D-R. D-R. D-R. D-R.	D-R. N-E. D-R. A-L. A-L. D-R. D-R. D-R.	P.B&B. P.B&B. P.B&B. P.B&B. D.Own. P.Lon. P.B-L. P.Own. Roc. Roc. P.Lon. P.B&B.	W-G. W-G. W-G. W-G. Own. B-L 214. Own. M.M. MM-O. W-G.T-71. W-G.T-9.	Spi Spi Own Blo 2 Blo 2 M.M. M.M. 4.	Own. Own. Own. Own. Own. Own. Tim. 51500. Eat 502. Own 600. Sal M. Own	S14. S14. S14. S14. S14. S14. S14. S14.	Own Own Own Own Own Sal F. Tim 11709. Eat 200F Own 100. Sal. Col 5540.
LaFrance-Republic	1 199 1	132 Op. 133 133 131 131 131 131 131 131 131 131	8 P 30x5 2 P 30x5 2 P 30x5 P 30x5 P 30x5 P 30x5 P 30x5 7 P 30x5 6 B 6.00/20 8 P 30x5 6 P 30x5	P 30x5 P	Bud J214. Own Con 17E Con W10. Bud H86. Pontiae Con W-10. Con 25A Lye CT Con 29L Wau XA. Con 18E Lye WTG	6-27x444 6-3x444 6-33x	21	64-2806 64-2806 64-2806 64-2806 61-3006 65-2706 61-3006 65-2707 61-306 61-30	Jen. Jen.	G. M.	D-R. A-L. D-R. A-L. A-L. A-L. N-E. A-L. A-L. A-L. D-R. A-L. A-L. A-L. A-L. D-R. D-R. D-R. D-R. D-R. D-R. D-R. D-R	D-R. D-R. A-L. A-L. A-L. A-L. A-L. A-L. A-L. D-R. A-L. A-L. A-L. A-L. A-L. A-L. A-L. A-L	D.B-L. P.B&B. P.B&B. P.B&B. P.B&B. P.B&B. P.B&B. P.B&B. P.B&B. P.B-L. P.Lon. P.B-L. P.B&B. P.B. P.	War T9 B-L 214 War B-L 214 W-G T9 W-G W-G W-G T9 Own B-L 214 War T9 B-L 20 Own W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G TA W-G T-20 Clar W-G Clar Cla	Spi 2. Spi 2. Spi 2. Spi 2. M.M. U-P. Blo 3. Spi 3. Spi 3. Blo Blo Blo Blo Blo Blo Blo Blo Blo Cle Spi 4. Spi 4. Spi 4. Spi 4. Spi 4. Spi 4. Spi 5. S-P 3. S-P 3. S-P 3. S-P 3. S-P 3. S-P 3. Spi 2. Spi 4. Blo Cle Spi 5.	Tim 52200H Tim 51000H Tim 5200H Col Col Col Col Sol Cia B370. Cia B370. Cia B370. Cia B370. Tim 52200H Sol F Col 54028. Tim 51200H Tim 52200H Tim 52200H Tim 5200H Tim 5200H Tim 5200H Tim 51000B Tim 51000B Tim 51000B Tim 51000B Tim 5200H Tim 5200H Tim 5200H Tim 5200B Tim 520B Tim 52D Tim	B. SF. SF. SF. SF. SF. SF. SF. SF. SF. SF	Tim 11710H Shu 5429 Col. Col. Tim Cla F208 Cla F208 Own. Tim 11703H F. Col 5530 Tim 11703H Tim 11703H Tim 11703H Tim 11703H Tim 11703H Tim 11703H Tim 11703H Tim 11710H Tim 11710H Tim 11710H Tim 11710H Tim 11710H Tim 11703H Own BL. Col 5540 Col 5530 Own. Tim. Sal Sal Sal Sal Sal Sal
1 ¹ / ₄ Ton Brockway. Juni Brockway. Clinton. 20 Indiana 11 Indiana. Indiana. International. S- International S- Kenwerth LaFrance-Republic C Moreland A Studebaker.	75 DB 199 X 11 74 224 26 285 154 -1 ce 154 40 12	13 15 13 13 145 15 16 16 16 16 16 16 16 16 16 16 16 16 16	80 P 30x5 37 P 32x6 50 P 30x5 50 P 30x5 50 P 30x5 37 P 32x6 30 P 30x5 30 P 30x5 40 P 30x5 44 B 6.00/20 36 P 30x5 44 B 6.00/20 46 P 30x5 46 P 30x5	P 30x5 P 32x6 P 30x5 P 30x5 P 30x5 P 30x5 P 30x5 P 30x5 DP30x5 P 30x5 DP30x5 P 32x6 B 7.00/20 P 32x6 P 32x6	Wis. Con. Bud WTU. Her. Con. Lyc CT. Lyc 4SL. Con 18E. Lyc 4SL. Con 18E. Own	6-3%x45 4-3%x53 4-4x5	22. 27. 22. 25. 25. 27. 22. 22. 25. 27. 22. 27. 22. 27. 27. 27. 27	5 38-200 3 *65-27 5 *36-18 6 46-20 6 46-20 3 65-27 5 43-23 3 61-28 3 61-30 3 61-27 3 61-30 3 71-32 6 45-16	00 Zen. 00 Zen. 00 Zen. 00 Str. 00 Str. 00 Str. 00 Zen.	V. V. V. V. V. V. V. V. V. V. V. V. V. V	A-L. SplA-L. A-L. A-L. D-R. D-R. D-R. A-L. A-L. A-L.	A-L. A-L. D-R. A-L. A-L. D-B. D-F. D-F. A-L. D-F. L-N	P.B&B P.B&B D.B-L. P.B-L. P.B-L. P.B&B P.Own P.Own P.B-L. P.B-L. P.B-L. P.B-L. P.B-L. P.B-L.	B-L B-L 31 B-L 31 B-L B-L Own Own B-L Ful WO-BI B-L 20 Cla	Spi Spi 2. Blo Spi Spi Spi Spi Spi M.M. M.M. Spi Spi Pet Spi Spi Spi Pet Spi Spi Spi Spi Spi	Col. Col. Col. Col. Col. Col. Col. Col.	SI SI SI SI SI SI SI	Shu
1½ Ton Atterbury Autocar Available T- Brockway E- Brockway E- Brockway (Y) Chevrolet Uti Chevrolet UL D Clinten. Corbitt 7 Day Elder Diamend T 2 Dodge Bros UF Dodge Bros F- Dodge Bros F- Dodge Bros F- Dodge Bros F- Douglas BG Douglas Douglas Duplex Duplex Duplex ABBREVIATIO	ity 5 anl 5 32 21 86 85 16 99 14 30 6 -35 14 -36 14 C4 19 B4 20 B6 21 GF 28 GS 28 101 8	60 1 90 1 95 1 45 1 75 1 95 1 95 1 95 1 95 1 100 1 150 1	31 P 30x5 57 P 30x5 50 P 32x6 50 P 32x6 35 B 6,00/20 56 P 30x5 36 B 6,00/20 36 B 6,00/20 40 B 6,00/20 60 B 7 30x5 60 B 7 30x	P 32x6 P 34x7 P 32x6 P 32x6 P 32x6 P 32x6 DP30x5 DP30x5 P 32x6 DB6.50/20 DP30x5 P 32x6 DB6.00/20 DB6.00/20 DP30x5 P 32x6 P 34x7 P 32x6 P 32x6	Lyc WTG Own Con 16C Wis Con Own Bud WTU Con 18E Con 16-C. Her WXA Own Own Own Down Bud WTU Bud WTG Bud WTU Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG Bud WTG	6-3x43/4 6-4x43/4 6-33/6x45	21 38 38 27 25 44 26 22 22 22 22 22 22 22 22 22 22 22 22	6 64-28 4 82-24 3 66-26 6 50-21 3 50-26 3 50-26 3 50-26 3 61-3 3 61-3 3 61-3 3 63-3 3 63-3 3 63-3 3 63-3 3 63-3 3 57-2 5 36-1 5 36-1 5 37-1 5	000 Zen 000 Str. 000 Str. 000 Zen 000 Can 000 Zen 000 Zen	GV V V V V V V V V V V V V V V V V V V	D-F D-F D-F D-F D-F D-F D-F D-F D-F D-F	L. D-I L-N L-N L-N L-N L-N L-N L-N L-N L-N L-N	P.B&B P.Lon D.B-L D.B-L P.B&B P.Own P.D.B-L P.B&B P.Own P.B&B P.B P.B P.B P.B P.B P.B P.B P.B P.B P.	War T9. B-L 51. B-L 214. B-L. Own. Own. B-L 31. B-L 214. B-L. Own. B-L 31. Cov. Own. Own. Own. Own. Own. Own. Own. Usur Sulfar. Ful SU12. Ful SU12. Ful SU12. B-L. B-L. W-G T9.	Spi Spi Blo Spi Spi Own Own 2 Blo Spi Spi Spi Spi Spi Spi Spi Spi Spi Cle 2 Cle 3 Cle 2 Cle 3 Blo 2 Cle 3 Blo 2 Spi	Tim 52200) Own SA. Tim 52200; Col Col Own. Own. Cla 501. Tim 52200 Tim 52200 Col 55004. Own. Own. Own. Own. Own. Wis 4627 Wis 4627 Wis 4627 Tim 64600 Tim 64600 Tim 52200	H. SI SI SI SI SI SI SI SI SI SI SI SI SI	Tim 117101 Tim 1473. Shu 5429 Col. Col. Col. Wm. Wm. Shu 5405. Tim 11703 Tim 11703 Tim 1703 Tim 1706



AMERICAN GASOLINE

			TIRE	SIZE		ENGINE	:		FUE	L EM	Elect Syst		Make			REAR AXI	LE	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Frent	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and M	Gearset, Make and Model	Universals, Make and Number	Make and Model	Final Drive and Type	Front Axle, Make and Model
1½Ton—Con			D # 80000	D # 00/00	W. TOO	0.017.404		20, 0700				D. D.		W G 750	a . e	T. POCONII	l _{n1}	m: 0001011
Fageol. 104 Federal T. E. Federal E. E. Federal E. E. Federal F. E. Federal F. E. Federal F. E. F. Fisher-Standard 15/ Fisher-Standard 16/ Fisher-Standard 16/ Fisher-Standard 16/ Fisher-Standard 16/ Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. A. Ford A. Ford A. A. Ford	0 830 1 1090 7 1525 1 1090 7 1525 1 1090 1 1525 1 1090 1 1090	131 132 132 144 156 122 123 16 112 123 16 112 123 16 112 112 113 113 113 113 113 113 113 113	B 7.00/20 B 6.00/20 B 6.00/20 B 6.00/20 P 30x5 P 30x5	DB6.50/20 DB6.50/21 DB6.50/22 DB6.50/22 DB6.50/22 DB6.50/22 DB6.50/26 P 32x6 P 32x6 B 6.00/20 P 30x5 P 32x6 DB6.00/2 DP30x5 DB6.00/2 DP30x5 DP32x6 DP33x5 DP30x5 DP30x5 DP32x6 DP33x6 DP33x6 DP33x6 DP33x6 DP33x6 DP33x6 DP33x6 DP32x6 DP33x6 DP3x6 DP33x6 DP3x6 DP33x6 DP3x6 DP33x6 DP3x6 DP	Con W10. Con 17E Con 16C Con 17E Con 16C Con 18C Con S4 Con 16C Con S4 Con 16C Con W10 Wis SU Own Own Bud DS6. Bud HS6 Pontiac Buick Con 18E Con 16C Con 16C Lyc 4SL Lyc 4SL Lyc 4SL Lyc 4SL Lyc 4SL Lyc 4SL Lyc 4SL Lyc 4SL Lyc 4SL Lyc 4SL Con 16C Bud HS6. Con 16C Con 16C Bud HS6. Con 16C	6-33 \$ 14 4 4 4 5 1 4 4 1 4 1 4 1 4 1 4 1 4 1	24.0 27.3 27.3 27.3 27.3 28.9 24.0 25.6 24.0	48-2500 60-2600 64-2500 60-2800 65-2700 50-2200 49-2800 50-2000 40-2200 40-2200	Zen Ze	M. V V V V G V V V G V	D-R. D-R. A-L. A-L. A-L. Own Own	D-R. D-R. A-L. A-L. A-L. Own Own	P.Lon	W-G T9. W-G T9. Own B-L 214. B-L 314. B-L 314. W-G T9. Cot A. Own	Own 2	Cla B374 Cla B 370 Tim 52005H Tim 52200H Tim 54200H Tim 54200H Tim 52200H Own Own	SF. SF. SF. SF. SF. SF. SF. WE	Tim 11703H.
Gramm Stewart 2	B 14	95 1 95 1	H 40 B 6.50/20 B 6.50/20	DB6.50/20 B 6.50/20	Lyc 4SL. Lyc 4SL.	6-31/4x4 6-31/4x4	1/2 25 1/2 25	.3 61-26	UU Str	V	D-J	R. D-1	C. D.Ful.	Ful	Spi 3	Cla	S1	2
Acme. Amer. LaF. Chief. Atterbury. Autocar. Autocar. Autocar. Available. T. Available. T. Brockway-Indiana Chicago. Chicago. Clinton. Coleman. Coleman. Coleman. Coleman. Coloman. Colo	-20 -23 -24 -27	00 00 00 00 00 00 00 00 00 00 00 00 00	p P 32x6 p P 32x6 p P 32x6 156 P 32x6 156 P 32x6 146 B 7.50/21 62 S 34x4° 163 P 32x6 163 P 32x6 163 P 32x6 163 P 32x6 163 P 32x6 163 P 32x6 163 P 32x6 165 P 32x6 165 P 32x6 166 P 32x6 167 P 32x6 168 P 32x6 169 P 30x5 162 P 30x5 162 P 30x5 162 P 30x5	DP34x7 DP34x7 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DB7.00/ DB7.50/ DS34x4 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6	Own Own Own Own Own Own Own Own Own Own	6-334x5 6-334x4 6-4x43 6-4x43 6-334x4 6-334x4 6-334x4 6-334x4 6-4x43 6-334x3 6-4x43 6-334x3 6-4x43 6-334x3 6-334x3 6-334x3 6-334x3 6-334x3 6-334x3	1/2 25 1/2 31 38 38 34 34 33 34 33 34 37 27 38 34 27 38 38 38 38 38 38 38 38 38 38 38 38 38	3 65-27 7 65-21 3 62-28 6 85-30 4 82-24 4 82-24 3 66-26 8 67-23 8 67-23 3 68-25 6 43-22 3 68-25 6 43-22 3 68-25 6 43-22 7 73-24 4 72-24 5 96-36 6 43-27 7 73-27 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	00 .	VV	. AI D-1. AI D	A I A I A I A I A I A I A I A I A I A I	D.B-L. R. P.B&B R. P.Lon. R. D.B-L. R. D.B-L. L. D.B-L. L. P.B-L. R. D.B-L. R. D.B-L. L. P.B-L. R. D.B-L. R. D.B-L. R. D.B-L. L. P.B-L. R. P.B-L. L. P.B-L. R. P.B-L. L. P.B-L. R. P.B-L. L. P.B-L.	Ful MGU1 Ful MGU1 B-L. W-G T9. W-G T9. 3. Own B-L 314. B-L 35.	Blo Spi Spi Spi Spi Spi Spi Spi Spi Spi Spi	Wis 6617 Wis 6617 Tim 65001 Tim 54000 Cla B610. Tim 54200 Cla B610.	OH BOH SOH	F. Tim 14703B Tim 31000F Tim 31000F Tim 31000F Tim 31000F Tim 31000F Tim 31000F Tim 31000F Tim 31000F Tim 31000F Tim 31000F Tim 14703. Tim 14703. Tim 14703. Tim 12703F Tim 15302. Tim 15302. Tim 15302. Tim 14703I Tim 1470

TRUCK CHASSIS—Continued



			TIRE	SIZE		ENGIN	Е		SYST		Elect		Make			REAR AX	LE	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Frent	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and N	Gearset, Make and Medel	Universals, Make and Number	Make and Model	Final Drive and Type	Front Axle, Make and Model
Ton—Cont W.D. He	33420 3240 3240 3240 3240 3240 3240 3240	168 162 130 141 131 131 140 141 141 141 141 141 141 141 141 14	P 34x7 P 36x6 P 30x5 P 30x5 P 30x5 B 6.50/20 B 7.00/20 P 30x5 P 32x6	DP30x5 DB6.50/20 DB6.50/20	Bud HS6. Buick. Con 16C. Lyc ASA. Con 16C. Lyc CAW. Con 16C. Lyc CAW. Con 16C. Lyc Con 16C. Lyc Con 16C. Lyc Con 16C. Lyc Con 16C. Lyc Con 16C. Con 16C. Lyc Con 16C. Lyc Con 16C. Lyc Con 16C. Lyc Con 16C. Lyc Con 16C. Lyc Con 16C. Lyc ASL. Her WXB. Bud. Lyc 4SL. Her WXB. Bud. Lyc 4SL. Her WXB. Bud. Lyc 4SL. Her WXC. Con 16C. Con 16C. Bud HS6. Bud DW6. Dwn AB. Own AA. Own FA. Bud DS6. Bud HS6. Bud DW6. Con 16C.	6-3 kar49k 4-4 kar41k 6-3 kar49k 4-4 kar41k 6-3 kar49k 4-4 kar4 6-3 kar49k 6-	31.5.26.3 3.27.3.27.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.327.3.333.5.5.5.5.6.5.328.3.33.5.5.5.5.6.5.328.3.33.5.5.5.5.6.5.328.3.33.5.5.5.5.6.5.328.3.33.5.5.5.5.6.5.328.3.33.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5	56-2000 58-3000 76-2500 76-2500 55-2600 55-2600 55-2600 66-2900 34-2000 37-1856 26-2000 43-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800 61-2800	Zen. Zen. Jen. Mar. Mar. Mar. Jen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Z	V. V. M. M. M. M. M. M. G. G. V.	A-L. D-R. D-R. D-R. D-R. A-L. A-L. A-L. A-L. A-L. Eis A-Bo A-Bo A-Bo D-R. A-L. D-R. A-L. D-R.	A-L. A-L. D-R. D-R. A-L. A-L. A-L. A-L. Non. Non. Non. D-R. A-L. D-R. A-L. D-R. D-R. D-R. D-R. D-R. D-R. D-R. D-R	D.BL. P.B-L. P.Own D.Own D.Own D.Jon D.Oyn D.Jon D.Ful D.Ful D.Ful D.Ful D.Ful D.B-L P.B&B P.Own P.Own P.Own P.Own P.Own P.Own P.B-L D.B-L	B-L 35. B-L 20. Mun. Mun. Mun. Mur. W-G T9. W-G T9. Cov W4C. Ful SU12. Ful SU12. Ful KU-10. B-L 35. Ful KU-10. B-L 51.	Blo Blo Blo 2 Blo 2 Blo 3 Blo 2 Spi M.M. 5 M.M. 5 M.M. 5 M.M. 5 Spi 4 S-P 3 Spi 5 Spi 5	Eat 2002. Eat 2002. Own 900. Eat 2002. Tim 56200H Tim 54200H Wis 6617. Tim 54200H	WF. S1/2/2 BF. S1/2/2 BF. BF. S1/2/2 S1/2/2 S1/2/2 SF. S1/2/2 S1/2/2 SF. BF. WF. BF. 2F. BF. 2F. 2F. 2F. 2F. 2F. 2F. 2F. 2F. 2F. 2	Tim 31000E Col 4003 Shu 5405 Shu 5405 Shu 5405 Tim 12703E Tim 12703E Cla 304 Shu 550 Shu Shu 550 Shu Shu 550 Shu Shu 550 Shu Eat 430A. Eat 430A. Eat 430A. Tim 12703E Tim 12703E Tim 12703E Tim 12703E Tim 12703E Tim 12703E Tim 14703E Own AB. Own AB. Own AB. Tim 14703I Own XA. Own Tim 14704I Own. Tim 14704I Own. Own. Own. Own. Own. Own. Own. Own.
21/2 Ton Acme	330 330 330 340	Opp Op Op 18 12 12 12 12 12 12 12 12 12 12 12 12 12	8 P 34x7 6 P 34x7 6 P 34x7 0 P 34x7 0 P 34x7 0 P 34x7 0 P 34x7 10 P 34x7 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 10 P 32x6 11 P 32x6 12 P 32x6 12 P 32x6 13 P 32x6 14 P 32x6 14 P 32x6 14 P 32x6 14 P 32x6 14 P 32x6 14 P 32x6 14 P 32x6 14 P 32x6 14 P 32x6	DBS.43/2 DP34x7 DB7.50/2 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP35x6/2 DP35x7	O Lye ASD. Own Own Wau ML. Wau MK. Con. Con. Con. Con. Con. Own Own Own Own Own Own Own Own Own Own	6 4x4/2 6 33/xx4/2 6 33/xx4/2 6 4x4/2 6 33/xx5 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 63/xx4/2 6 6 63/xx4/2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	38.38.38.38.38.38.38.38.38.38.38.38.38.3	4 82-24(4 82-24(7 65-21)(6 43-22(9 9 56-22) 9 56-22 9 16 4 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 73-24(4 77-22)(3 7 7 73-24(4 77-22)(3 7 7 73-24(4 77-22)(3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 Str 1 1 1 1 1 1 1 1 1	V. V. V. W. V. W. W. V.	A-L. A-L. D-R A-L. D-R D-R A-L. Eis. A-L. A-L. A-L. A-L. D-R A-L. D-R D-R A-L. I-N D-R D-R A-L I-N D-R D-R A-L I-N D-R D-R A-L I-N D-R D-R A-L I-N D-R Eis Eis Eis Eis Eis	A-L A-L D-R D-R D-R D-R D-R D-R D-R D-R D-R D-R	D.B.L. D.Cov D.Cov D.Cov D.Ful. D.Ful. D.B.L. B-L 55-7 B-L 56-4 Own Cov W4C- B-L 51 B-L 51 B-L 51 B-L B-L B-L B-L B-L B-L B-L B-L B-L B-L	Blo Blo Blo Blo Blo Spi Spi Spi Blo Spi Spi Spi Spi Spi Spi Spi Spi Spi Spi	Tim 652001 Tim 650001 Tim 650008 Tim 562001 Tim 562001 Tim 582001 Tim 65001 Tim 65001 Tim 65001 Tim 65001 Tim 65001 Tim 65001 Tim 652001 Tim 652001 Tim 652001 Tim 652001 Tim 652001 Tim 652001 Tim 562001 Tim 562001 Tim 562001 Tim 562001 Tim 562001 Tim 562001 Tim 560001 Tim 542000 Tim 542000 Tim 542000 Tim 65001 Tim 65000	2F 2F 2F 2F 2F 2F 2F 2F 2F 2F 2F 2F 2F 2	Col. Shu. Shu. Shu. Shu. Shu. Tim 15733 Wis. Tim 15733 Wis. Tim 15733 Tim 15733 Tim 15733 Tim 15733 Tim 15730 Shu 5582E Shu 5582E Shu 5550. Shu 5550. Cla F304. Tim 14700 Tim 14700 Tim 14700 Tim 14700 Tim 14700 Tim 14700 Tim 14700 Tim 1573 Eat 433F Eat 433F Col 5500. F. Tim 1470 Tim 1470 Tim 1470 Tim 1470 Tim 1470 Tim 1573 Eat 433F Eat 433F Eat 433F Shu 550 Shu 550 Shu 550	



AMERICAN GASOLINE

			TIRE	SIZE		ENGINE			SYST		Elect Syst		Make			REAR AX	LE	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Front	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and N	Gearset, Make and Model	Universals, Make and Number	Make and Model	Final Drive and Type	Front Axle, Make and Model
2½ Ton-Con	t'd	159	P 34x7	DP34x7	Her WXC	6-4x4½	38.4	74.9400	7	¥7	D.D.	D.B.	DDI	D.T. 214	o-:	T' ESSOUL	OTO .	T: 14700II
Seiber 66 Seiber 55 Leiber 55 Larrabee 44 LeMoon HB2 LeMoon HB2 Dmort 25 Dmort 25 Cange 5 2950 2550 3950 33115 3250 73600 3275 04000 44555 A C C 44 2690 8 3295 T 4600 8 3750	180 180 174 146 154 160 169 124 130 168 161 175 166 168 118 181 181 170	P 32x6 P 32x6 P 32x6 P 34x7 P 34x7 P 34x7 P 36x6 P 36x6 P 36x6 B 7.50/20 P 36x6 P 36x6 B 7.50/20 P 36x6 B 7.50/20 B 7.50/20	DP32x6 DP32x6 DP32x6 DP34x7 DP34x7 DP34x7 DP34x7 DP32x6 DP38x6 DP38x6 DP38x6 DP38x7 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP32x5	Con 16R. Bud. Lyc TF. Her YXB. Con 16R. Wau 6MS. Wau 6KU. Her OX. Her WXB. Bud DW6. Bud DW6. Bud DW6. Lyc TF. Lyc TF. Lyc TF. Lyc TF. Own 3A. Own GRB.	6-4x4/5 6-33/x4/2 6-33/x4/2 6-32/x4/3 6-32/x4/3 6-32/x4/2 6-32/x4/2 6-32/x4/2 6-32/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-33/x4/2 6-34/x4/	38.4 33.8 31.2 38.4 33.7 43.3 25.6 33.7 31.5 33.7 40.8 27.3 38.4 29.4 31.5 39.2 38.4 28.9	74-2400 83-2800 80-2200 70-2400 80-2200 72-2500 80-2000 46-2000 56-2000 83-2000 65-2600 72-2400 58-2400 115-3200 115-3200 72-1600	Str Str Zen Str Zen Str Zen	V V V V V V V V	D-R D-R A-L A-L D-R A-L A-L A-L A-L A-L D-R D-R D-R D-R D-R D-R D-R	D-R. D-R. A-L. D-R. A-L. A-L. A-L. A-L. A-L. A-L. A-L. A-L	D.B. L. D.B-L. D.Ful D.B-L. D.B-L. D.B-L. D.Ful D.Ful D.Ful D.B-L. D.B-L. D.B-L. D.B-L. Ful D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.Ful D.B-L. D.Ful	B-L 35. B-L 314. B-L 314. Ful MGU14. Ful MGU. B-L 35. B-L 51-5. Ful VU. B-L 35. B-L 35. B-L 35. Ful Ful Ful Own 4B. Own 4B.	Spi 5. Spi 3. Spi 3. Spi 3. Spi 3. Blo 3. Blo 3. Blo Blo Spi 5. Spi 3. Spi 3. Spi 3. Spi 3. Spi 3. Spi 3.	Tim 58200H Tim 56000H Tim 56000H Tim 56200H Wis 8817 Tim 56200H Tim 56200H Tim 56200H Wis 6617 Wis 6787-L Own 30 Own 60 Own 60 Tim 56000H	WF. BF SF. 2F. WF. 2F. 2R. 2R. 2R. BF. SF. SF. SF. SF. SF.	Tim 14703H Tim 14703H Tim 14706H Shu 510 Tim 14706H Shu 510 Tim 14703. Tim 15733H Shu 5510 Shu 5429 Tim 14704H Tim 15733H Tim 15733H Tim 12703H Tim 12703H Tim 12703H Tim 12703H Tim 12703H Tim 14704H Own 51A.	
Wichita 6-6 Witt-Will RB Witt-Will R	2 2900 2 3000	16 15 15	5 P 34x7 8 P 32x6 8 P 32x6	DP34x7 DP32x6 DP32x6	Wau 6ML. Con 16R Con 16R	6-4x4 ³ / ₄ 6-4x4 ¹ / ₈ 6-4x4 ¹ / ₈	38.4 38.4 38.4	77-2200 72-2400 72-2400	Str Zen.	M. M.	D-R. D-R. D-R.	D-R D-R D-R	D.B-L D.B-L	B-L 51. B-L 35. B-L 35.	S-T 3 Spi Spi	Own 30R Tim 56001H Tim 63720H	BF.	Shu 5550 Tim 14703H Tim 14703H
Autocar 2.1-3T. S Autocar 2.1-3T. S Autocar 2.1-3T. S Autocar 2.1-3T. SC Available. T-39, T-44 Available. T-39, T-44 Brock way-Indiana. I Brock way-Indiana. I Brock way-Indiana. I Brock way-Indiana. I Brock way-Indiana. I Brock way-Indiana. I Chicage. 1-30 Clinton. Coleman. D Coleman. D Comcord. J X Corbiti 3-4 T. 18V Day-Elder. I Diamend T 5 Diamend T 6 Doige Bros. F- Dodge Bro	200 474 430 430 430 430 430 430 430 430 430 43	0 22 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 P 36x8 S 36x5 P 36x8 P 36x8 P 32x6 3 P 34x7 0 B 9.00/20 9 B 9.00/20	DP36x8 DP32x6 DP32x6 DS36x4° DP34x7 DP34x7 DP34x7	Con 18R. Own Own Own Own Con. Con. Con. Con. Con. Con. Con. Con	0-1 1 1 1 1 1 1 1 1 1	40 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 89-240 9 42-139 14 82-240 15 88-220 16 82-240 17 85-240 18 12-250 18 18-250 18 18-250 18 18-250 18 18-250 18 18-250 18 18-250 18 18-250 18 18-250 18 18-250 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18-250 18 18 18 18 18 18 18 18 18 18 18 18 18 1	0 Str 0 Zen 0 Zen	V. V. V. V. V. V. V. V. V. V. V. V. V. V	A-Bo D-R D-R D-R D-R D-R D-R D-R D-R D-R D-R	A-L. D-R D-R A-L. A-L. A-L. A-L. A-L. A-L. A-L. A-L.	D. Own. P. B&B. Cov. Own. Own. Own. Own. Own. Own. Own. Own	Own Spi Spi Spi Spi Spi Spi Spi Spi Spi Spi	Tim 85200H Tim 65200H Tim 65200H Own H. Own H. Own H. Tim 65720. Tim 65720. Tim 65720. Tim 65706H Wis. Tim 65706H Wis. Tim 65706H Wis. Tim 65706H Wis 69337L Own Own Own Own Own Own Own Own Own Own	2F. WFF WF 2F. WFF WFF WFF WFF WFF WFF WFF WFF WFF W	Shu 55723 Tim 15733B Tim 15733B Tim 15733B Tim 15733B Tim 15733B Tim 14703f Tim 33010f Tim 33010f Tim 33010f Tim 3500f Own J Own J Own J Own J Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 5572 Shu 550 Shu 5572 Shu 550 Tim 15300 Tim 157331 Tim 157331 Tim 157331 Tim 157331 Tim 157331 Tim 15733 Tim 15733 Tim 15733 Tim 15733 Shu 5550 Tim 15700 Tim 15300 Own Own Own Own Tim 14703 Own Own Own Own Own Shu 5550 Tim 15700	

TRUCK CHASSIS—Continued



			TIRE	SIZE		ENGINE	1 1		SYST		Electr	em	Make		_	REAR AX	LE	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Frent	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and B	Gearsel, Make and Model	Universals, Make and Number	Make and Medel	Final Drive and Type	Front Axle, Make and Model
Ton-Cont	'd	190	P 34x7	DP34x7	Con 18R.	6-4x4½	38.4	82-2400	Str	G.	R-Bo	A-Bo.	D.B-L.	B-L 55	Spi	Tim 65001H	WF	Tim 15733F
iber . 6 iber . 6 iber . 5 iber . 5 France Republic . F Ige . 1 Ige .	15150 53740 53740 53740 53740 53740 53740 53750 5375	174 151 140 155 169 153 147 147 147 147 130 130 130 134 150 161 175 163 179 144 210 160 161 161 161 161 161	P 34x7 P 32x6 P 36x8 P 36x8 P 36x7 P 36x8 P 36x7 P 34x7 P 32x6 P 32x6 P 32x6 P 32x6 P 32x6 P 32x6 P 32x6 P 32x6 P 32x6 P 32x7 B 8.257(20) B 7.50(20) B 7.50(20) B 7.50(20)	DP34x7 DP32x6 DP36x8 DP36x8 DP36x8 DP34x7 S36x8 S 36x8 DP34x7 DP32x6 DP34x7 DP32x6 DP34x7 DP3	Con. Lyc TF Her YXC. Her YXC. Her YXC. On 18R. Wau 6SRL Bud DW6 Own AB. Own AB. Own BG. Her WXB. Con 18R. Her OXC. Her WXB Gon 18R. Her WXB Gon 18R. Her WXB Gon 18R. Her WXB Gon 18R. Lyc TS. Lyc ASD. Wau 6ML,	10-414/2 6-43/415/6 6-33/415/4 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/2 4-41/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6 6-33/415/6	38.4 31.2 45.9 38.4 45.9 33.7 28.9 28.9 31.5 31.5 33.7 28.9 33.7 25.6 33.7 40.8	60-2200 60-2200 75-2600 75-2600 67-2400 56-2400 66-2400 73-2200	Str Zen Str Zen Str Zen Str Str Str Str Str Str Str Str Str Zen Zen Zen Zen Zen Zen	V V M G V V V V	D-R A-L A-L D-R A-L D-R R-Bo N-E N-E A-L A-L A-L A-L A-L A-L A-L A-L A-L A-L	D-R. A-L. A-L. D-R. N-E. N-E. A-L. A-L. A-L. A-L. A-L. A-L. A-L. A-L	D.Own. D.Own. D.Own. D.Own. D.Ful. D.Ful. D.Ful. D.Ful. D.Ful. D.Ful. P.B-L. D.Ful.	B-L 51. Ful MGU14 B-L 55. B-L 60 Max B-L 35. B-L 51-4. B-L 51. Own AB. Own AB. Own BG. Own BG. B-L 35.	Spi 2. Spi 4. Spi 2. Spi 4. Cle. Blo 4. Blo 4. Blo 4. Blo 5pi. Blo Blo Blo Blo	Own 74	BF. SF. 22F. WF. 22F. CD. 22F. WF. 22F. 22F. 22F. 22F. 22R. 22R. 22R. 22	Tim 14703. Tim 14706. Tim 15300. Tim 16310. Tim 16310. Tim 16310. Tim 15733. Tim 15733. Tim 15733. Tim 15733. Own AB Own AB Own AB Own AB Tim 14703. Tim 15733. Tim 15733. Tim 15733. Tim 16302. Own XB Tim 14704. Tim 15733. Tim 16302. Tim 16302. Tim 14704. Tim 15733. Tim 16302. Tim 1533. Tim 16302. Tim 15733. Tim 16302. Tim 15733. Tim 1533.
hite itt-Will Ri itt-Will Ri /2 Ton me	8 4400 B 3400	159	P 34x7 P 34x7	DS36x5 DP34x7 DP34x7 B 10.50/20 S 36x10	Own GRB. Con 18R Con 18R	. 4-41/4x53/4 . 6-4x41/2 . 6-4x41/2	28.9	55-200 42-140	0 Zen.	G	Eis	A-L.	D.B-L D.Own.	B-L 51 Own 2R	Blo Own	Wis 8817B. Own 2R Own 2R	2F. BF. WF 2F. 2F.	Own 2DI. Tim 15733 Tim 15733 Shu 510. Own 2R. Own 2R.
ner, La France Chief terbury	IS 4600 IS 4800 A 5350 95 -6 4400	0 114 0 195 170 1 196 1 196	P 30x8 B 9.75/20. I P 40x8 I P 40x8 I P 36x8 D P 36x8 D P 34x7 D P 40x8 2 P 34x7	DP36x8 DB9.75/20 DP40x8 DP40x8 DP36x8 DP36x8 DP34x7 P 40x8 DP34x7	Con 20R Own Own Own Con Bud BUS Bud BA6 Bud BA6 Bud EBU Con 18R	0-4/8x43 6-4/8x43 4-4/9x5/ 6-4/4x43 6-4/8x43 6-4x5/8 6-4/8x5/8 6-4/8x5/8	43.443.440.8 40.8 40.8	85-240	0 Zen.	V.	D-R	D-R	D.Ful.	Own 2R. Own B-L 51-5. Own T. Own T. Own T. B-L. B-L 55. Ful RU 16. B-L 51.	Spi	. Wis.	2F. 2F. 2F. 2F. 2F. 2F. 2F.	Tim 33000 Own J Own J Tim 26450 Shu Tim 15302 Wis
iamond 1 uplex	5	130 160 15 15 15 15 15 15 15 15 17 15 15 15 15 15 15 15 15 15 15 15 15 15	2 S 36x5 0 S 36x8 5 P 34x7 7 P 34x7 7 P 36x8 7 P 36x8 4 P 38x9 8 P 38x9 5 B 36x6	S 36x10 S 36x8 DP34x7 DP34x7 DP34x7 DP36x8 DP36x8 DP36x8 DP38x9 P 38x9 S 36x12	Her YXC Bud EBU-l Con 18R Con 18R Con 21R Con 21R Bud BA6 Wau SRS Bud BA6 Buick Con 18R	6-4x41/2	38. 38. 4 45.	9 94-220 9 57-210 4 85-220 4 81-240 4 81-240 9 102-240	0 Zen. 0 Zen. 0 Str 0 Zen. 0 Zen. 0 Zen.	V. M. V. V.	Eis. D-R. D-R. D-R. D-R.	A-L. D-R D-R D-R D-R	D.Cov. D.B-L P.B&B. D.B-L D.B-L	B-L 55 B-L 55 B-L 55 B-L 55	Pet P-S 4 Blo 4 Blo 4	Tim66700D: Own Tim65706H Tim 58200E Tim 65720E Tim 58200E	H WF I. P WF I. SF. I. WF I. SF.	. Tim 16300 Own . Own . Tim 1573 . Tim 1573 . Tim 1573
() Gen.Mot. T60. 3½ camm-Bernstein ug	87 74 2-6 4C	16 12 12 16 14 16 16 17	4 P 34x7 2 P 36x8 0 P 38x7 0 P 36x8 0 S 36x6° 6 S 36x6° 2 P 36x8 4 P 36x8 4 P 36x8	DP34x7 DP36x8 DP38x7 DP36x8 S 40x12° S 36x10 S 40x12° DP36x8 DP36x8 DP34x7	Buick. Con 18R Bud DW6 Bud DW6 HaS 152 HaS 151 Bud GL6 HaS 160 Lye TS	6-334x5 6-4x4½ 6-334x5 6-334x5 4-434x5 4-434x5 6-434x5 6-434x5 6-334x5	33. 38. 33. 33. 36. 22. 28. 236. 48. 43. 36.	7 94-25(4 82-24) 7 70-21(7 70-21) 1 60-18(9) 59-18 1 60-18(6 114-19) 3 105-20(2) 89-26	00 Mar 00 Zen. 00 Zen. 00 Zen. 00 Zen. 00 Zen. 00 Zen. 00 Zen. 00 Zen.	W.V.V.	D-R A-L R-B R-B R-B R-B R-B R-B	D-R O D-R O D-R O D-R O D-R	D.Own. D.B-L. D.B-L. D.B-L. P.Own. P.Own. D.B-L	Mun. B-L 55 Ms B-L 51. B-L 55. Own. Own. Own. B-L 60. B-L. Ful MGU	Spix BloBlo 3Blo 3OwnOwnOwnSpi 4Spi 6Spi 3	Tim 65720E Own U Tim 66700E Tim 65706I Wis 1238A. Est 74. Own 1200 Own Tim 65706I Tim 65706I Tim 58200.	H. WI 2F 2F 2F 2F 2F CI H. W	F. Eat 527F F. Tim 1573 Shu 610 Shu 610 Eat 74F Own 400 Eat 74F F. Tim 264 F. Tim 157 Tim 147
a FranRepublic . Narrabee . Ioreland . mort . ierce-Arrow . elay	1-1 .65 428 E7 353 .35 HB 456 DC 474 .80 533	30 10 20 11 20 11 30 1 30 1	74 P 34x7 71 P 36x8 36 B 8.25/20 82 P 34x7 50 P 36x8 56 S 36x5 75 P 36x6 63 S 36x5 56 S 34x4 63 S 36x5	DP36x8 DB8.25/2 DP34x7 DP36x8 DS36x6 DP40x8 S 40x12 S 36x8	Wau 6KS. Con 18R. Her WXC Her WXC Own Bud BA6. Bud BA 6 Wau 6XK Wau 6XK	6-4x4 ³ / ₄ 6-4x4 ¹ / ₂ 2 6-4 ¹ / ₆ x4 6-4x4 ¹ / ₂ 4-4x5 ¹ / ₂ 6-4 ¹ / ₆ x5 6-3 ³ / ₄ x4 6-3 ³ / ₄ x4	38 38 40 38 25 18 40 18 40 12 33 12 33	.4 77-25 .4 82-24 .8 73-30 .4 73-20 .5 .8 83-20 .7 66-24 .7 66-24	00 Zen 00 Zen 00 Zen 00 Zen Str. 00 Zen 00 Zen 100 Zen	V Q N N V V	A-L D-R I A-L I A-L . D-F . A-L	A-L D-F A-L D-I A-I L-N	D.Ful. D.B-L. D.Own D.Ful. D.Own Ful. D.B-L. D.B-L. D.B-L.	Ful VUOG B-L 51 B-L 51 Ful MGOO B-L 55 Ful VU Cov SHO B-L 51	S-P. Spi. Pet Blo 4. Spi. Blo Blo Spi. Spi. Spi.	Eat. Tim 652001 Tim 65001 Wis 1567H Own 60 Own 74 Tim 65000 Wis 8317L	D W H W 2F W 2F H W W	F. Tim 1577 F. Tim 1577 Shu 5533 F. Tim 157 L. Tim 163 F. Tim 163 F. Tim 157 F. Shu 542
terung tewart. tudebaker Valter. F Vard La France 30 Vhite 63. 2½-3-3 Vichita. Vitt-Will Vitt-Will	. 55 46 6 T 50	00 Or 1 1 50 1 00 2	0515 30x5 84 B 7.50/20 97 B 8.25/20 97 B 8.25/20 74 S 36x5 15 P 34x7 65 P 34x7 59 P 34x7	DB9.00/2	24 Own o 20 Own	8-3½x4 6-4½x4 8-3¾x4 K. 6-4½x4 3. 4-4¼x5 6-4x5¼ L. 6-4¾x5 6-4x4½ 6-4x4½	36 39 34 43 1/2 36 34 40 84 28 38 1/8 45 38	2 115-32 4 80-18 4 100-24 8 83-22 9 54-16 4 72-18 9 88-26 4 82-2	200 Str. 800 Str. 400 Str. 200 Str. 800 Zer 800 Zer 400 Zer 400 Zer	N V	M. D-I R-I D-I D-I V. Eis M. D-I M. D-I M. D-I	R. D-1 R. D-1 R. D-1 R. D-1 R. D-1 R. D-1	R. D.Lon R. Own R. P.B-L R. P.B-L P.Own R. P.Own R. D.B-L R. D.B-L R. D.B-L	Ful Own B-L 51 B-L 51 Own 4B Own 4B B-L 60 B-L 51 B-L 51	Spi Own Cle Cle Spi 3. Spi 4. S-T Spi Spi	Eat 74. Own 1200 Own Tim 657061 Tim 657061 Tim 657061 Tim 65200. Eat. Tim 65001 Wis 1567H Own Own 60 Own 74 Tim 65000 Wis 8317L Tim. Eat. Own 10C Own 10C Own 55 Own 10R Tim 56001 Tim 56001 Tim 56001	S1 21 21 21 21 21 S1 W	2. Eat. Own Tim 157 7. Tim 157 7. Own 55 7. Own 610 7. Shu 610 7. Tim 157 7. Tim 157
A Ton Armleder. Atterbury. Available	.41 30 C 47 [-45 .4T	00 O	p. P 34x7 86 P 36x8 p. B 9.75/20 70 P 40x8 40 B 9.75/20 90 S 36x5	DP34x7 DP36x8 DB9.75/2 DP40x8		7 0 4 42 4	38 34 48 48 48 48 48 48 48	3.4 73-2 0.8 82-2 3.6 100-2 5.9 100-2 5.9 97-2	000 Zei 400 Zei 000 Str 400 Zei 000 Zei	n 1	7. A-1 7. D-1 7. D-1 M. A-1 M. A-1	R. A-I R. D-I L. A-I	L. D.Ful L. D.B-I R. D.B-I L. D.B-I L. D.B-I	Ful MGU B-L. B-L 60-7. B-L 60 M	Spi Spi Blo Spi 3. Spi 4.	Tim 58000 Tim 65700 Tim 65720 Wis. Tim 65720 Tim 66600 Tim 66600 Tim 65704 Tim 65704	DH W	F. Shu 557 F. Tim 153 F. Shu 638 F. Shu. F. Tim 163



AMERICAN GASOLINE

			TIRE	SIZE		ENGINE			SYST		Elect Syst		Make			REAR AXI	E	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Front	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and	Gearset, Make and Model	Universals, Make and Number	Make and Model	Final Drive and Type	Front Axle, Make and Model
Ton-Cont's	5650	183	P 36x6	DP36x6	Wau DU	4-4½x6¼	32.4	54-1500	Zen	V	D-R.	D-R.	D.B-L	B-L 55&60. B-L 55&60. B-L 55&60. B-L 55. B-L 56. Own Mun. Cov Rus. Ful MG 14. Ful H. Ful H. Ful H. B-L 55&60. B-L 60 Max B-L 55. B-L 55. B-L 55. Own BC. B-L 35. Ful G. Own WC. Cov SHO. Ful MGU. B-L 51. B-L 55.	Spi 4	Tim 66700		Tim 16000.
ageol	6400 5750	184 183	P 36x6 P 36x6 P 34x7	DP36x6 DP36x6 DP34x7	Wau DU Wau AB Wau SRL. Con 18R. Con 21R. Con 21R. Rod BA6. Wau SRL. Bud BA 6. Buick. Own 331. Con 21R. Con 21R. Lyc TS. Lyc TS. Con 18R. Con.	6-4½x5¾ 4-4¾x5⅓ 6-4×4⅓	48.0 45.9 38.4	89-2200 81-2400	Zen Zen	V	D-R. D-R.	D-R. D-R.	D.B-L D.B-L	B-L 55&60 B-L 55	Spi 4 Blo 4	Tim 66700. Tim 66700. Tim 58200H.	WF.	Tim 16000. Tim 16000. Tim 15733E
isher-Stand. Super 6 isher-Stand. Super 6 isher-Stand. Super 6		150	P 34x7 P 36x8	DP34x7 DP36x8	Con 18R	6-4x4½ 6-4%x4¾	38.4	81-2400 102-2400	Zen Zen	V	D-R. D-R.	D-R. D-R.	D.B-L D.B-L	B-L 55 B-L 55	Blo 4	Tim 65720H. Tim 58200H.	WF.	Tim 15733F Tim 15733F
isher-Stand. Super 31/2	5000	156	P 36x8 P 36x8	DP36x8 DP36x8	Con 21R Bud BA6	6-43/8x43/4 6-41/8x51/8	45.9	102-2400 83-2000	Zen	V	D-R. R-Bo	D-R. R-Bo	D.B-L D.Ful	B-L 55 Ful HU 16.	Blo 4	Tim 65720H.	I	Tim 15733H Own
WD. SSU Garford 80 X) Gen.M . T42 2½-47 X) Gen. Mot T82-4-7 T	5220 5330	148	P 38x9 S 36x6	P 38x9 S 36x14	Wau SRL Bud BA 6	6-43/8x51/8 6-41/8x51/8	45.9	102-2200 83-2000	Zen	V	Eis	N-E A-L.	O.H-S D.Own	B-I 60 Max	Blo	Own Tim 66700DF	WIT	Own Tim 16302.
X) Gen.M . T42 21/2-47 X) Gen. Mot T82-4-7 T	1975 3795	141 155	P 34x7 B 9.00, 20	DP34x7 DB9.00/20	Buick Own 331	6-3%x45/8 6-33/4x5	28.3	76-2500 94-2500	Mar	M. M.	D-R. D-R.	D-R. D-R.	D.Own	Mun	Spi	Eat 1717. Tim 66704. Wis 12527K. Wis 69317.	S1/2. WF.	Eat 433F Eat 527F
GrammGY	4345	210	B 9.00/20 B 8.25/20	DB9.00/20 DB8.25/20	Con 21R Con 21R	6-43/8x43/4 6-43/8x43/4	45.9	100-2200	Zen	M. M.	A-L.	A-L.	D.Jon D.Ful	Cov Rus Ful MG 14.	Blo 3	Wis 12527K. Wis 69317	2F	Tim Eat 423
iramm4		100	S 36x5° S 36x5°	S 36x12° S 36x12°	Lye TS	6-37/8x5 6-37/8x5	36.2	85-2200 85-2200	Zen	M. M.	A-L.	A-L.	D.Ful	Ful H. Ful MGU B-L 51	Blo 3	. Wis 1450 Wis 1250	2F.	Shu 5550B.
lahn		15	P 36x8 P 40x8	DP36x8 DP40x8	Con 18R	6-4x4½ 6-43/8x4¾	38.4	82-240 100-240	Zen	V.	A-L.	A-L.	D.B-L	B-L 51 B-L	Blo Spi 3	Wis 1237H Wis	2F	Shu
		170	P 36x8 2 P 36x8	DP36x8 DP36x8	Con 18K Con Her YXC3. Bud BA 6. Wau SRL. Her YXC Con 20R Bud BA6 Her YXC3.	6-45/8x43/4 6-41/8x51/8	51.2 40.0	103-220	Zen	V.	D-R. R-Bo	D-R	D.B-L D.B-L	B-L 55&60.	Spi 4 Spi	Tim 66720. Tim 65706H	WF	Tim 26450. Tim 15733.
Kleiber. 65 La France-Republic M Lange. F1	DOGG	月 14	4 P 36x8 8 P 40x8	DP36x8 DP40x8	Wau SRL. Her YXC	6-43/8x51/8 6-43/8x43/4	40.0	97-200 94-220	Zen. Str	V. M	A-L.	A-L.	D.Ful D.B-L	B-L 60 Max	Spi 3	. Wis 1237H Wis 1552B.	2F.	Tim 16300.
Maccan 6	5 4600	10	7 B 9.75, 20 7 P 36x8	DB9.75/20 DP36x8	Con 20R Bud BA6	6-41/8x43/4 6-41/8x51/8	40.	8 89-240 8 90-240	O Zen.	G. V.	D-R.	D-R D-R	D.B-L	B-L 55	Spi 3	Tim 65706 F Tim 65702D Tim 65720W	WF	Tim 16702 Tim 15302
Maccar	2850 n 5250	0 17	0 B 9.75, 20 4 P 36x8	DB9.75, 20 DP36x8	Own BC	. 6-45/8x43/4 . 6-4x51/2	51.38.	3 106-240 4 100-230	0 Str	v.	D-R. N-E.	D-R N-E	B-L P.Own.	Own BC	Spi 4	Own BC	. 2F.	lOwn BC
MorelandBD	7 356 C 450	5 18 0 18	4 P 34x7 0 P 34x7	P 34x7 DP34x7	Her WXB.	. 6-384x414 . 6-41/8x48	33.	7 67-240 8 88-240	0 Zen. 0 Str	M V.	A-L.	A-L.	P.B-L. D.Ful.	B-L 35 Ful G	. Cle Blo	Own Tim 65706H	PIWE	Tim 15733
Noble	C 5100 0 5380	0 16	2 S 36x5° 5 P 38x7	DS36x6 S 40x14	Own WC . Bud BA 6.	4-41/2x63/ 6-41/8x51/	32.	8 90-240	Str	P. V.	D-R.	D-R A-L	D.Own. P.B&B.	Cov SHO.	Spi Blo	Own WC Own 74	: W1	Own WC. Tim 16302
Schacht De Luxe 3 Selden. 47 Cl	0	17	4 B 9.00/20 1 P 36x8	DB9.00/20 DP36x8	Her WXC.	6-4x4 ¹ / ₂	38.	4 73-220 4 82-240	0 Zen. 0 Str	. P.	. A-L. D-R	A-L. D-R	D.Ful D.B-L.	Ful MGU. B-L 51	Spi	. Wis 8837AL Wis 1237H	2F.	Shu 5572. Tim
Selden	6	Op.	B 9.00/20 B 9.00/20	DB9.00/20 DB9.00/20	Wau SRL.	6-43/8x51/ 6-43/8x51/	8 45. 8 45.	9 97-200 9 97-200	0 Str 0 Str	. P.	D-R D-R	D-R D-R	P.B-L P.B-L.	B-L	Spi	Tim 65720H Tim 65706D	. WF	. Shu 5550
Witt-Will	4 444 X 460	0 15	9 P 36x8 9 P 36x8	DP36x8 DP36x8	Her YXC3. Own BC Her WXB. Con 20R Own WC Bud BA 6. Her WXC. Con 18R. Wau SRL. Wau SRL. Con 20R Con 21R.	6-41/8x43/ 6-43/8x43/	4 40.	8 88-220 9 100-260	O Zen.	. E.	D-R D-R	D-R D-R	D.B-L D.B-L	. B-L 55 B-L 55	Spi	Tim 65706H	WF	Tim 15733 Tim 15733
4½ Ton	100				1	7,000												
(X) Gen. Met. T44 3-41 Larrabee	2 209 5 550	5 14 0 16	1 P 34x7 8 B 9.75/20	DP34x7 DB9.75/2	Buick Con 21R	. 6-3 16x45	8 28.	3 76-250 9 97-240									HWF	. Tim 16702
Ster. DW18-64, 41/2-61 Ster. DC19-64, 41/2-51	2	. 16	6 S 36x5	S 36x10 S 36x10	Buick Con 21R Wau 6KS Wau 6XK. Wau SRL.	6-4x43/4 6-33/4x41	38.	4 71-200 7 61-200	00 Zen.	. V.		L-N L-N	D.B-L D.B-L	B-L 55 B-L 55 B-L 51	Spi Har	Tim 65704 Own	. CD	. Tim 15300
Ward La France 45	Ď	. Op	3 S 36x5 P 36x8	DP36x8		1	1		JU Str.	. F.	D-1	. D-N	. F.D-L.	Б-ш	. iopi			
5 Ton	L 467	5 19	2 S 36x5	S 40x12	Con B7	. 4-5x6	40.	0 62-156	00 Str.	. v.	Non	Non	D.B-L	B-L 60-7	. Blo	Tim 66700. Own R. Tim 66704B Own 16R. Tim 65706F Tim 65706F Tim 66704V Tim. T' 68702 DH Wis 122 Wis 122 Tim 66704V	WF	Tim 16300
Acme	R 550	0 Op	S 36x6 B 9.75/20	DS40x6 DB9.75, 2	Own 5R	4-43/4x6 6-41/8x51	36. 40.	1 50-120 8 75-180	00 Zen 00 Zen	V	A-B	ABo	1 D.Own. P.B&B.	Own 5R	Spi	Own R. Tim 66704B	YWE	Own 5R. Tim 15733
Am. La Fra, Big Ch. I Armleder	6 672 1 350	5 22 0 Op	26 P 40x8 P 36x8	DP40x8 DP36x8	Own Her WXC 20 Con 21R.	6-4½x6 2. 6-4½x4½	48	6 115-16 8 80-22	00 Zen 00 Zen	V	D-R	D-R	P.B-L. D.Ful.	Own Ful MGU.	. Own Spi	Own 16R. Tim 65706E	I. WI	Own 16R. Shu 5572
				DB10.50/ DP42x9	20 Con 21R. Own	6-43/8x43	4 45 48	9 101-24	00 Zen 00 Str.	V	A-L. D-R	A-L L-N	dp.Lon	Own B	Spi	Tim66720D Own C	H W 2F.	Own CL.
Autocar . TF Available . T- Brockway-Indiana . 2: Clinton. 120L	A 610	0 19 Op	P 38x9 B 9.75/20	DP38x9 DB9.75/2	Own Wau 6RB	6-4½x43 6-5x534	48 60	6 101-24 0 125-20	00 Str. 00 Zen	V	D-R	L-N D-R	dp.Lon.	Own T B-L 70	. Spi Blo	Own TF. Tim 66704V	V. WI	Shu 638
Brockway-Indiana	L 550	0 20	32 P 40x8 04 S 36x6	DP40x8 DS40x7	Con Bud BTU	6-43/8x43 4-5x61/2	4 45 40	9 100-24 0 61-14	00 Str. 00 Zen	M	Spl.	. A-L	D.B-L.	B-L 60	Blo	Tim T' 68702DH	PWI	Shu. Tim 17300
Clinton. 120Ll Coleman X-100 5-6	T	120	04 S 36x6 14 P 42x9	DS40x7 P 42x9	Bud BTU. Bud BA6.	. 4-5x6½ . 6-4½x5½	8 40	0 61-14 8 85-24	00 Zen 00 Zen	V	Spl D-R	. A-B	o D.B-L. D.Ful.	B-L 60 Ma Ful RU 16	Spi	T'68702 DH Wis 122	P WI	Wis 122F.
Coleman X-100 5-6 Coleman X-100F 5-7 Corbitt 24W Day Elder 24W Diamond T 100	6	14	14 P 42x9 95 P 38x9	P 42x9 DP38x9	Bud GL Con 20R Con 21R. Her YXC2	6-41/2x6 6-41/8x43	48 40	6 120-20 8 100-22	00 Str. 00 Zen	V	D-R D-R	D-H	D.Ful. D.B-L.	Ful HU 16	Spi	Wis 122 Tim66704D	H WI	Wis 122F. Tim 26450
			62 P 38x9 71 S 36x6 85 S 36x6	DP38x9 S 40x12	Con 21R. Her YXC2	6-43/8x43 2 6-41/2x43	4 45 48	9 100-26	00 Zen 00 Zen	. G	D-R	. D-H	D.B-L. D.Cov.	B-L 60	. Spi 4.	Tim 66702F	HWI	Tim 26450 Tim 1730
Douglas	41552	251 12	85 S 36x6 96 B 9.75/38	S 40x12 DB9.75/3	8 Bud GL6.	$6-4\frac{1}{2}x6$	40	6 114-19	00 Zen 00 Zen	E	L-N	L-N	D.Ful.	Ful HU 18	Blo 5	Wis 1458 Wis 1567	2F	Shu 650
Douglas. I Duplex M 5-7 To Federal 4C6A 4-5 Federal 4C6AB 4-5	765 T 473	0 Op	P 34x7 P 36x8	DS36x7 DP36x8	Con 20R.	6-4½x6 6-4½x43	4 40	8 90-22	00 Str. 00 Zen	V	. A-L	D-H	P.B&B	B-L 55	P-S 4.	Tim 66702F Tim 68700D Wis 1458 Wis 1567 Tim 68700. Tim 66704F Tim 66702 Own Own. Own. Tim 66702 Tim 66702 Wis 1700. Wis 1700. Wis 1700. Tim 66700T Tim 66700T	PW	C. Own
Federal 4C6AB 4-5 Fisher-Standard 100 Freeman BA-1	T 496	50 19	JO P 36x8	DP36x8 DP36x8	Con 21R.	6-4 ¹ / ₈ x4 ³ 6-4 ³ / ₈ x4 ³	4 40 45	8 90-22 9 102-24	00 Zen 00 Zen	:: N	D-R	. D-F	D.B-L.	B-L 55	Blo 4	Tim 667021	V. W	Tim16700
FreemanBA-18	36 600	10 1	56 P 36x8 86 P 36x8	DP36x8 DP36x8	Bud BA6. Bud BA6.	6-41/8x51	8 40	8 83-20 8 83-20	00 Str. 00 Str.	V	R-E	o R-1	o D.Ful.	Ful HU 16	Cle	Own	I.	Own
F.W.D. N (X) Gen. Mot. T60 3½ (X) Gen. Mot. T82 . 4	15 760 -6 316	00 1	65 B12.75/20 54 P 36x6	DP36x8	Buick	6-4 ¹ / ₈ x5 ¹ 6-4 ³ / ₈ x5 ¹ . 6-3 ³ / ₄ x5	8 45	9 102-22 7 94-25	00 Zen 00 Mai	. P	I. D-R	D-I	D.B-L.	B-L 60 M	Blo	Tim 68700I	P W	Tim 1630
(X)Gen. Mot. T82 4 *Garford	-7 393 90 583	35 1 30 1	55 P 36x8 75 S 36x6 36 B 9.00, 20	DP36x8 S 40x14	Bud BA6.	6-3%x5	8 40	7 94-25 8 83-20	00 Mai 00 Zen	V	. A-L	. D-I	D.Own	Mun	Pet	Tim 65706.	W	F. Eat 527E
Gramm.	60	. 1	53 S 36x6	S 36x14			4 36	1 127-23	00 Zen Zen	·· V	A-L	A-L	D.Ful.	Ful HU 16	Blo	Wi 12527K	W 2F	Wis 30
Gramm Gramm-BernsteinF	60 V	. 1	53 S 36x6 62 P 36x8	S 36x14 DP36x8	Con 21R.	6-378x5 6-438x4	32 4 45	.6 85-22 .9 102-24 .9 100-24	00 Zen 00 Zen	V	. A-L	A-L A-L	D.Ful.	B-L 60	Blo	Tim66720E	HW	F. Tim 1671
Hahn	H	1	51 P 36x8 35 P 38x9	DP36x8 DP38x9	Con 21R. Bud BA6.	6-43/8x4 6-41/8x5	4 45 8 40	9 100-24	00 Zen	V	R. F	Bo D-F	D.B-L.	B-L 55	Blo 4.			
Hug. International HS-10- International W	-3	1	60 S 36x6° 60 S 36x6°	S 40x14 S 40x12°	HaS 152.	4-434x5: 6-376x5 6-436x4: 6-436x4: 6-426x5: 4-434x5 6-426x4: 6-426x5: 6-436x4: 4-45x5: 6-436x4: 4-5x6: 6-436x4: 4-5x6:	36 36	1 60_19	00 Zon	V	R_I	los	POwn	Own	Own	Own 1300	2F	Own 500.
Kleiber	66 50 T 57	00 2 75 1	06 B 9.75/20 48 P 40x8	IDP40x8	Her YXC	2 6-4 ³ / ₈ x4 2 6-4 ¹ / ₂ x4	4 45 48	61 99-22	001Ste	. IN	A IA-T	- IA-I	. ID.B-L.	B-L B-L 60 M	ax Sni fi.	IWis 1700	2F	Tim 1630
Maccar	85 6A 63	50 1	77 S 36x6 70 B 10.50/2	DS36x6 B10.50/2	Bud BA6. Her YXC	3 6-45/8x4	8 40 34 51	3 106-24	00 Str	F	. D-I	2. D-1	R. B-L	B-L 55 B-L 60	Spi	Tim 66702	W	Tim 2645
			86 S 36x6 54 P 36x8	DS40x6 DP36x8	Own BC	6-4x51/2	38	4 100-23	00 Str	V	. N-I	C. N-1	E P.Own	B-L 55 Own BC	Spi 2.	Own BC	101) IOwn BC
Mack BC 3½-5 T Mack BJ 3½-5 T Mack AK 3½-5 T Mack AK 3½-5 T Mack AC 3½-5 T Mack AC 3½-5 T	on 61 on 51	50 1 50 1	69 P 36x8 62 S 36x5	DP36x8 DS36x5	Own BK. Own AC	4-5x6	40	.0 77-18	00 Str	1	R-1	Bo	P.Own	Own BJ	Spi 5.	Own AC	CI	Own BJ. Own AK Own AK Own AC Tim 167
Mack AK 31/2-5 T Mack AC 31/2-5 T	on 52 on 49	50 1 50 1	62 S 36x5 56 S 36x5	DS36x5 DS40x5	Own AC	4-5x6 4-5x6	140	.0 77-18	00 Str	\	R-1	Bo	P.Own	Own AC		Own AC	2F	Own AC
Pierce-Arrow I	D 54	00 1	82 B 9.00, 20 62 S 36x6	DB9.00,: DS36x7	Own RD	4-5x6 6-4\frac{1}{2}x6 4-4\frac{1}{2}x6 6-4\frac{3}{8}x4	1/2 40 3/4 32	0 70	77	. 3	FAT	I A T	DBT	IR.T. 51	Dot	Tim 65706	H. W	F. Own RD
Schacht De Luxe	AC 66	15 2	30 B 9.00 2 74 P 36x8	4 DB9.00/ DP36x8	24 Con 21R. Her WXC	6-43/8x4	3/4 45 1/2 40	.9 112-24 .8 80-22	00 Str 200 Zer	\	A-I A-I	A-I	D.Ful.	Own RD. Ful VU. Ful MGU B-L 55.	Blo Spi	Own Own	2F	F. Own RD Tim 1660 Shu 5572 Tim
Selden	7C		64 P 36x8	DP36x8	Con 21R	6-43/8x4	34 45	.9 100-24	00 Str	1	7. D-1	R. D-	R. D.B-L	B-L 55	Blo	Wis 1517H	2F	Tim

TRUCK CHASSIS—Continued



			TIRE	SIZE		ENGINE			SYST		Elect	tem	Vake			REAR AX	LE	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Front	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carbureter Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and Make	Gearset, Make and Medel	Universals, Make and Number	Make and Model	Final Drive and	Front Axle, Make and Model
tewart 31X falter FHS Vard La France 50C Vard La France 58C Vard La France 58C Vhite 55 Vhite 4 3½ to 5 T Vitt-Will R5	4990 7600 5100 4765 6300 5300	Op. Op. 174 174 180 159	B 9.75/24 S 36x6 S 36x6 S 36x6	DS36x6 DB9.75/24 DS40x7 DS40x7 S 40x12 DS40x6 DP36x8 DP38x9	Wau 6SRL Own 6 Wau SRL Wau AB Own GRB Own GRB. Own 1AB Con 20R	6-4½x5¾ 6-4¾x5½ 6-4½x5¾ 4-4¼x5¾ 4-4¼x5¾ 6-4¾x5¾	48.6 45.9 48.6	100-1800 97-2000 100-1800	Str	P P	R-Bo D-R. R. Bo	D-R. D-R. D-R.	Own P.B-L	Ful	Own Spi	Tim	2D WF. WF. 2F 2F	Tim Tim Own 52 Own Own 9D.
mer. La France 26½ mer. La France U7½ mLa F. Big Ch. 16% tutecar . F 7½ Terrockway 290-7½ Ter cockway 290-7½ Ter coleman F-200 7½ Tor orbitt 5-7. 33W ederal . X8 7½ Tor ederal . X8 7½ Tor ederal . X8 7½ Tor ederal . X8 7½ Tor ederal . X8 7½ Tor ederal . X8 7½ Tor ederal . X8 7½ Tor . W.D. M7 7½ Ter reeman . GL 7½ Ter reeman . GL 7½ Ter ereman BAS-156 6-1 reeman . GL 7½ Garford . 100Zl X)Gen. Mot. T60 3½ X)Gen. Mot. T82 4 iramm . 66 iramm . 66 iramm . 66 iramm . 66 lahn . 77 5-7 ndiana . 290 7½ Tor ofaFrance-Republic 35- fack AC 5½-7 Tor fack AC 5½-7 Tor fack AC 5½-7 Tor fack AC 5½-7 Tor fack AC 5½-7 Tor fack AC 5½-7 Tor fack AC 7½ Tor	5756 6000 6500 6500 6500 6500 6500 6500	Op. Op. Op. Op. Op. Op. Op. Op. Op. Op.	S 36x7 P 40x8 S 36x7 P 38x7 P 38x7 P 38x7 P 38x7 P 38x7 S 36x6 P 44x10 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x6 S 36x7 S 36x6 S 36x7 S 36x6 S 36x6 S 36x7 S 36x6 S 36x5 S 36x6 S 36x5 S 36x6 S 36x5 S 36x6 S 36x5 S 36x6 S 36x5 S 36x6 S 36x5 S 36x6 S 36x5 S 36x6 S 36x5 S 36x6 S 36x6 S 36x5 S 36x6 S 36x7 S 36x6 S 36x7 S 36x6 S 36x7 S 36x6 S 36x7 S 36x6 S 36x7 S 36x6 S 36x7 S 36x6 S 36x7 S 36x6 S 36x7 S	D\$40x7 D\$40x8 DP40x8 DP40x8 D\$40x8° S 40x14 DP44x10 D\$40x6 S 40x14 DP44x10 DP38x9 DP38x9 DP38x9 S 40x14 DB9,75/202 S 36x14 S 40x14 DB9,75/202 S 36x14 S 40x14 DB9,75/202 S 36x14 S 40x14 DB9,75/202 S 36x14 S 40x14 D\$3x9 D\$40x8 D\$40x8 D\$36x6 D\$36x7 S 36x12 S 40x14 D\$3x9 D\$40x8 D\$36x8 S 40x14 S 40x10 S 40x12 S 40x14 S 40x10 S 40x10 S 40x14 S 40x10 S 40x14 S 40x10 S 40x14 S 40x10 S 40x14 S 40x10 S 40x14 S 40x10 S 40x14 S 40x10 S 40x14 S 40x10 S 40x1	Con 21R. Con B7. Con 21R. Wau RB. Bud GL 6. Bud GL 6. Bud BA6. Bud BA6. Bud BA6. Bud BA6. Bud BA6. Com 331. Lyc TS. Her G. Con. Con. Con. Gwa 6AB. Com AP. Her YXC. Own AP. Her YXC. Own RF. Wau SRL. Wau SRL. Wau 6KS. Wau 6KS. Wau 6KS. Wau 6KS. Wau 6KSRL	4-43x66 6-43xx66 6-43xx43x 6-43xx43x 6-53x56 6-43xx43x 4-5x66 6-43xx56 6-43xx56 6-43xx56 6-43xx56 6-43xx56 6-33xx5 6-43xx56 6-33xx5 6-43xx56 6-43xx	36.1.48.6.48.6.6.1.46.0.45.9.40.0.45	50-1200 101-2400 110-12400 110-12400 117-2200 117-2200 117-2200 112-2200 112-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 114-2200 127-2300 127-2300 116-1800 150-200 150	Zen Zen Str Zen Str Zen Str Zen Str Zen Str Zen Zen Sch Zen V.V. E. V. M. M. V. M. M. V. M. M. V.	A-Bo D-R. D-R. Spl S	AB01 D-R. L-N. L-N. L-N. D-R. N-E. R-B0 R-B0 R-B0 R-B0 R-B0 R-B0 R-B0 R-B0	D.Own. P.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.B-L. D.Ful D.Ful D.Ful D.Ful D.Ful D.Ful D.Ful D.Ful D.Ful D.Own D.Ful D.Own D.Own D.Own D.Own D.Own D.Own D.Own D.Own D.Ful D.B-L. D	B-L 60 B-L 714 Ful HU 16. Ful HU 16. Ful HU 16. Ful HU 16. Ful HU 16. Ful HU 16. Ful HU 16. Ful HU 16. Ful HU 16. Ful HU 16. Ful HU 16. Ful H. Ful H. B-L Ful H. B-L B-L Ful H. B-L B-L Ful H B-L B-L Ful H B-L B-L Ful H B-L B-L B-L B-L B-L B-L B-L B-L B-L B-	Own. Own. Own. Spi 4. Spi 4. Blo Spi .	11m 66704. Wis 1700. Wis 1700. Wis 1700. Tim Wis 1567-H. Own AC. Own AP. Tim66704. Own. Own. Own. Own. Own. Own. Own. Own	WF. 2F. WF. WF. WF. WF. 2F. II. I. WF. WF. 2F. CD. WF. WF. WF. WF. WF. WF. WF. WF. WF. WF	Own 16R. Tim 27450. Shu. Tim 17300. Wis HD. Tim 2745W Own. Own. Own. Own. Own. Own. Own. Own.	
Tractor-Tru Amer. LaFrance. 5 Amer. LaFrance. 7 Amer. LaFrance. 10 Amer. LaFrance. 13 Amer. LaFrance. 15 Armleder. 15 Armleder. Armleder. Autocar. 5 Autocar. 5 Autocar. SCH Autocar. SCH Autocar. SCH Autocar. SCH Autocar. 1 Brock way-Indiana 1 Brock way-Indiana 1 Brock way-Indiana 1 Brock way-Indiana 1 Brock way-Indiana 2 Brock way-Indiana 2 Brock way-Indiana 2 Brock way-Indiana 2 Brock way-Indiana 2 Brock way-Indiana 2 Brock way-Indiana 2 Brock way-Indiana 3	C k S T 395 T 495 T 575 T 575 T 575 T 560 570 T 350 T 481 T	60 13 60 14 60 14 60 14 60 14 60 14 60 14 60 14 60 14 60 14 60 15 60	S 36x5 S 36x6 S 36x6 S 36x6 S 36x7 S 36x7 S 36x7 S 36x7 S 36x7 S 36x7 S 36x6 S 36x7 S 36x7	8 36x10 D836x6 D840x6 D840x7 D840x8 S 34x6 S 34x6 S 36x12 DP34x7 DP34x7 DP34x7 DP34x7 DP34x7 DP34x7 DP34x7 DP34x7 DP40x8 S 40x1 DP32x6 DP32x6 DP32x6 DP32x6 DP32x6 DP34x7 DP40x8 S 40x14 DP40x8 DP36x8	Own 2R Own 3R Own 5R Own 5R Own 5R Own 5R Her OX. Bud EBU-Bud YBU-Own Own Own Own Own Con	4-43/x6 4-43/x6 4-43/x6 4-43/x6 4-43/x6 4-425 1.4-43/x6 6-43/x43 6	36. 36. 36. 25.	9 42-14(1) 1 50-12(1) 1 50-12(1) 1 50-12(1) 1 50-12(1) 1 50-12(1) 1 60-17(1) 4 82-24(1) 4 92-24(1) 4 92-24(1) 4 92-24(1) 4 92-24(1) 4 92-24(1) 1 73-24(1) 8 89-24(1) 8 89-24(1) 8 89-24(1) 8 89-24(1) 9 100-24(1) 8 89-24(1) 9 100-24(1) 6 101-10(1) 6 101-10(1)	Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Zen. Str. Str. Str. Oo Str. Oo Zen. Oo Zen. Oo Zen. Oo Zen. Oo Str. Oo Str. Oo Str. Oo Str. Oo Zen. O	V. V. V. V. V. V. V. V. V. V. V. V. V. V	A-Be A-Be A-Be A-Le A-Le D-R D-R D-R A-Le A-Le A-Le A-Le A-Le A-Le A-Le A-Le	ABoo ABoo ABoo ABoo ABoo ABoo ABoo ABoo	1 D.Own. 1 D.Own. 1 D.Own. 1 D.Own. 1 D.Own. 1 D.B-L. D.B-L. D.B-L. P.Lon. dp.Lon. dp.Lon. dp.Lon. dp.Lon. D.B-L.	Own 2R. Own 3R. Own 5R. Own 5R. Own 5R. Own 5R. B-L 35. B-L 51. B-L 55. B-L 51. Own T. Own T. Own T. Own T. Own T. B-L 70. B-L 60 Mc Cov. B-L 55. B-L 55. B-L 55. B-L 55. B-L 155. B-L	. Spi	Own 2R. Own 5R. Own 5R. Own 5R. Own 5R. Tim. Tim. Own 5R. Tim. Tim. Own H. Own H. Own C. Own C. Tim 68720. Col. Wis. Wis. Wis. Wis. Tim. Tim. Tim. Tim. Tim. Tim. Tim. Tim	WF WF WF WF WF WF WF WF WF WF WF WF WF W	Own 2R. Own 3R. Own 3R. Own 5R. Own 5R. Own 5R. Tim. Tim. Tim. Tim. Tim. Tim. Tim. Tim



AMERICAN GASOLINE

			TIRE	SIZE	-	ENGINE			SYST		Electi		Make			REAR AX	LE	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Front	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and N	Gearset, Make and Model	Universals, Make and Number	Make and Model	Final Drive and	Front Axle, Make and Model
ramm D122 5 Toramm E118 6 Toramm 45-10 Toramm 45-10 Toramm 45-10 Toramm 60 15 Toram	1845 1845 1845 1845 1845 1845 1845 1845	141 141 151 151 151 151 151 151 151 151	P 32x6 P 34x7 P 34x7 4 P 34x7 4 P 36x8 5 P 38x7 5 P 38x7 5 P 38x7 5 P 32x6 5 P 32x6 2 P 32x6 2 P 32x6 3 S 36x5 3 S 36x5 3 S 36x5 3 S 36x5 3 S 36x6 3 S 36x5 3 S 36x6 3 S 36x6 6 S 36x6 6 S 36x6 6 S 36x6 6 S 36x6 6 S 36x6 6 S 36x6 7 S 36x7 8 S 36x7 8 S 36x6 8 S 36x6 9 S 36x5 9 S 36x6 9 S 36x5 9 S 36x6 9 S 36x7 9 S 36x6 9 S 36x6 9 S 36x6 9 S 36x6 9 S 36x7 9 S 36x7 9 S 36x6 9 S	DP34x7 DP30x5 DP32x6 DP32x6 DP32x6 DP34x7 DB9.00/20 S 36x12 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x14 S 36x8 DP34x7 DP34x7 DP34x7 DP34x7 DP34x7 DP34x7 DP34x7 S 36x8 S 40x12 S 40x12 S 40x12 S 40x12 S 40x12 S 40x12 S 40x12 S 40x12 S 40x12 S 36x8 DP36x8 DP36x8 DP36x8 DP36x8 S 40x12 S 36x8 DP36x8 S 40x12 S 36x8 DP36x8 DP36x8 DP36x8 DP36x8 S 40x12 S 36x5 S 36x6 S 36x6 S 36x6 DS36x5 DS36x6 DS	Buick. Buick. Buick. Buick. Own 331. Own 331. Own 331. Own 331. Own 331. Lyc 48L. Lyc 48L. Lyc 48L. Lyc 48L. Lyc TS. Lyc 48L. Lyc TS. Bud DW6. Con. Wau XA. Lyc 48L. Own FBB. Own FBB. Own FBB. Has 151. Has 151. Has 152. Has 152. Has 152. Own BC. Own BC. Own BC. Own BC. Own BC. Own AC. O	6-35/45/4 4-31/44/4 6-35/44/4 6-35/44/4 6-35/44/4 6-35/44/4 4-4/4,75/4 4-4/4,75/4 4-4/4,75/4 4-4/4,75/4 4-4/4,75/4 4-4/4,75/4 4-4/4,75/4 6-35/4 6-4/5/5 6-4/5/5 6-3/4/5 6-3/5/5 6-3/4/5 6-3/5/5 6-3/4/5 6-3/5/	25. 31. 31. 31. 31. 31. 31. 31. 31. 31. 31	76-2500 94-2500 94-2500 94-2500 94-2500 94-2500 94-2500 94-2500 94-2500 94-2500 94-2500 150-2700 85-2700 85-2700 85-2700 85-2700 85-2700 86-28	Mar. Mar.	MM MM MM MM MM MM MM MM MM MM MM MM MM	D-R. D-R. D-R. D-R. D-R. D-R. A-L. A-L. A-L. A-L. A-L. A-L. A-L. A-L	D-R. D-R. D-R. D-R. D-R. D-R. A-L. A-L. A-L. A-L. A-L. A-L. A-L. A-L	D.Own. D.Own. D.Own. D.Own. D.Own. D.Own. D.Jon. D.Jon. D.Jon. D.Jon. D.Ful. D.Wn. P.Own. P.Own. P.Own. P.Own. P.Own. D.D.Ful. D.Ful. D.B-L. D.B-L. L.D.B-L. L.D.B-L. L.D.B-L. L.D.B-L. L.Own. L.Own. D.Own. D.Own. D.D.B-L. D.B-L. W-G T7. Own A5. Own A-5. Own A-5. Own Own Own Own Own Own Own Own Own Own	Spi. Spi. Spi. Spi. Spi. Spi. Spi. Spi.	Wis 8800B. Col. Wis. Own 800 Own 800 Own 800 Own 1000 Own 1150 Eat 54 Own Own 1200 Eat 74. Own Own 1300 Own Tim 5200 Own AB. Own AB. Own AB. Own AB. Own AB. Own AB. Own AB. Own AB. Own AB. Own AB. Own AB. Own BC. Own AC. Own AC. Own AC. Own AC. Own AC. Own AP. Own AP. Own AP. Own AP. Own AP. Own AP. Own BC. Own AB. Own BC. Own AC. Own BC. Own 54200	WF WF WF WF WF WF WF WF WF WF WF WF WF W	Wis 30 Wis 30 Shu 5550 Col Col Col Own 200. Own 200. Own 300. Eat 54F Eat 54F Own 400. Eat 74F Eat 74F Own 500. Eat 74F Own BG. Own BG. Own BB. Own BC. Own BC. Own BJ. Own AC.	
Six-Wheeler Autocar. G 1 Autocar. G 2 Brockway-Indiana Chicago 1-50 Brockway-Indiana Chicago 1-50 Brockway-Indiana Chicago 1-50 Brockway-Indiana Chicago 1-50 Brockway-Indiana Chicago 1-50 Brockway-Indiana Day Elder 285 8 10 Day Elder 402 12 Diamond T 100 Diamond T 1601 Diamond T 1600 Diamond T 1601 Diamond T 1601 Douglas F66 Fageol 4-66 Fageol 4-66 Fageol 4-66 Fageol 4-66 Fageol 4-66 Fageol 4-66 Fageol 5-66 Fageol 10-6 Fageol 5-66 Fageol 10-6 Fageol 5-66 Fageol 10-6 Fageol 5-66 Fageol 10-6 Fageol	5T 82 5T 92 6T 96 6T 75 6T 96 75 6T 96 8T 75 8T 65 8T 75 8T 65 8T 75 8T 65 6T 75 6T 66 6 A 88 75 75 77 75 75 77 75 75 75 75	000 000 000 000 140 600 220 000 000 000 500 500 500 400 285	171 P 36x8 1212 P 38x7 174 P 36x8 164 B 8.25/2 164 B 9.00/2 164 B 9.75/2 104 P 36x8 175 P 36x8 175 P 36x8 175 P 36x6 120 P 36x7 195 P 36x6 140 B 6.00/2 145 B 6.00/2 145 B 6.00/2 145 B 6.00/2 145 B 6.00/2 145 B 6.00/2 145 B 7.50/2 17 34x7 170 P 36x8 185 B 7.50/2 170 P 36x8 185 B 7.50/2 170 P 36x8	0 DB 9.00 0 DB 9.00 0 DB 9.07 0 DB 9.75 P 36x8 DP34x7 DP36x8	//20 Con 21R. 20 Con 16-H Her YXC Her YXC Wau 6RB Her YXC Wau 6RB Bud GL6 Wau SRI Wau AB. Wau AB. Con W10 Con 17E. Con 20R. Con 20R. Con 21R Wau SRI Wau AB. Bud GL6 //20 GR 331.	6-1/24 6-1/24 6-1/25 6-1/26 6-	14 54 45 45 45 45 45 45 45 45 45 45 45 45	.2 110-18 .9 97-20 .9 100-20 .2 127-25 .9 94-22 .6 99-23 .0 126-18 .3 106-22 .0 126-18 .6 114-19 .9 89-23	800 Str 900 Zer 900 Zer	n. N n. V n. V n. V n. V n. V	J. L-M M A-I V. D-I V. D-I M D-I J. A-I V. A-I J. A	A-L R. D-H R. D-H R. D-H A-L A-I A-I A-I A-I A-I A-I Bo A-I N. L-N	D.B-L D.B-L R. D.B-L R. D.Cov D.Cov D.B-L D.Cov D.B-L D.B-L D.Ful	B-L 70. B-L B-L B-L B-L B-L B-L B-L B-L B-L B-L	ax Spi 6. Spi B4 Spi B4 Spi B4 Spi B5 SpB 5. ax SpiB5 SpP 5. Blo 5. PeS 6. 60 PeS 6.	Tim SW32 Tim SW20 Tim SW20 Tim SW30 Tim SW30 Tim SW31 Tim	0. WW W W W W W W W W W W W W W W W W W	F. Shu. F. Tim 1630 F. Tim 2645 F. Tim 1730 F. Shu 5582 F. Tim. F. Tim. F. Tim. F. Tim. F. Tim. F. Shu 615 F. Tim 1730 F. Tim 1730 F. Tim 1730 F. Tim 1730 F. Tim 1730 F. Tim 1730 F. Tim 1737 F. Tim 1737 F. Cla F208 F. Cla F208 F. Own

TRUCK CHASSIS—Continued



			TIRE	SIZE		ENGINE			FUE			trical tem	Make			REAR AX	LE	
MAKE, MODEL AND CAPACITY	Chassis Price	Standard W.B.	Front	Rear	Make and Model	Number of Cylinders, Bore and Stroke	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	Clutch, Type and M	Gearset, Make and Model	Universals, Make and Number	Make and Medel	Final Drive and	Frent Azle, Make and Model
Six-Wheelers	s—C	on	t'd	1.									İ	İ			İ	
Maccar 126 6	T	181	P 36x8	P 36x8	Bud BA6	6-41/8x51/8	40.8	78-2250	Str	V	D-R.	D-R.	D.B-L	B-L 60	S-C	Own AC	W	Tim 16302
MackAC 10 To	n 7500	177	S 36x6	S 40x12	Own AC	4-5x6	40.0	77-1800	Str	V	R-Bo	N-E	P.Own	Own AC	Spi 4	Own AC	CD.	Own AC
MackAP 10 To MorelandEI	n 12000	197	S 36x6 P 36x8	S 40x12	Own AP	6-5x6	60.0	150-2000	Str	V	R-Bo	N-E.	P.Own	Own AP	Spi 4	Own AP	.CD.	Own AC Tim 16300
MorelandEI	7 6595	190	B 9.00/20	P 36x8 DB9.00/20	Her WXC 2 Her YXC3	6-45/-48/	40.8	73-2000 105-2200	Zen	M.	A-LA.	A-L.	P.B-L	B-L 51 B-L 55		Own	WF.	Tim 16300
Moreland	7 6860	220	S 36x7	S 36x10	Her YXC 3.	6_45/243/	51 9	105-2200	Zen	M.	A-La.	A-14.	D D T	B-L 55	Cle	Own	WF.	Tim 16300 Tim 17300
MorelandTI	7 8245	221	S 36x7	S 36x10	Con 16H	6-43/x53/4	54 1	105-2200	Zen	M	A-T.	N-E	P.B.T.	B-L 714	Cla	Own	WE	Tim 17300
Relay 50SW 5	T 5505	152	P 36x6	DP36x6		6-334x5	33.7	73-2200	Zen.	V.	A-L	A-T	B-L	B-L 51	Blo			Tim 14704H.
Relay 60SW 7	T 6545	175	P 38x7	DP40x8	Bud BA6		40.8	83-2000	Zen	V	A-L.	A-L.	Ful	Ful VU	Blo	Own 60	2F.	Tim 15733H. Own 6D
White 63SW 200 3			B 8.25/20	DB8.25/20		6-4x51/4	38.4	72-1800	Zen	M.	D-R.	D-R.	P.Own	B-L 51 Ful VU Own 4B	Spi	Tim SW200E	W1/2	Own 6D
White 64SW 200 3 to 5		198	B 8.25/20	DB8.25/20	Own 1AB	6-43/8x53/4	45.9	96-1800	Zen	E	L-N	L-N	dp.Own	Own 7B	Spi 4	TimSW200W	WF.	Own 9D
White64SW3	00	100	B 0 00/20	DB0 00/90	Own 1AB	0 43/-53/	AE O	00 1000	77	173	T 37	T NT	1.0	0 70	0.14	TI'- CHIMOON	1	0 00
5 to 7½ T White 59A SW400		198	B 9.00/20	DB9.00/20	OWII IAB	0-47813%	40.8	80-1800	Zen	E	L-N	L-N.	ap.Uwn	Own 7B	Spt 4	LIMPA M300 A	W.F.	Own 9D
7½ to 10 Ton		204	P 40x8	P 40x8	Own 1AB	6-43/cx53/	45 0	96-1800	Zen	E	T_N	I_N	dn Own	Own 7B	Sni 3	Tim SW400W	WE	Own 5D
Whitcomb	T 6000	Op.,	P 36x8	P 36x8	Wis Z	6-41/5x5	48.6	103-2200	Str.	M	L-N	L-N	D.Ful	Ful	Own 2.	Own	WF	Own 5D Own
Whitcomb 10	T 7200	Op.	P 36x8 P 38x9	P 38x9	Wis Z	6-41/2x5	48.6	103-2200	Str	M.	L-N.	L-N.	D.Ful.	Ful	Own 2	Own	WF	Own

KEY TO REFERENCES AND ABBREVIATIONS

GENERAL

Gress Vehicle Weight—Chassis weight, plus body and cab, plus pay load. Chassis Price is for truck with standard wheelbase listed and with tires listed F.O.B. factory, unless other-

wise specified.

b—Price of Mack AC 7-10 ton, \$4,950, tires, \$36x5, D\$40x5; 11-14 ton, \$5,500, tires, \$36x6, D\$40x6; 15 ton, \$6,000, tires \$36x7, D\$40x7.

B—Balloon.

DB—Dual Balloons standard equipment.

P—High Pressure Pneumatics standard equipment.

DP—Dual High Pressure Pneumatics standard equipment.

S—Solids.

DS—Dual Solids.

Pneumatics furnished at extra cost.

ENGINE Make

Bud—Buda Company.
Con—Continental Motors Corp.
Has—American Car & Fdy. Co.
Her—Hercules Motor Corp.
Lyc—Lycoming Motor Corp.
Wau—Waukesha Motor Co.
Wis—Wisconsin Motor Mfg. Co.

FUEL SYSTEM Carburetor Make

Car—Carter Carburetor Make
Car—Carter Carburetor Co,
Joh—Johnson.
Mar—Marvel Carburetor Co,
Sch—Wheeler Schebler Co.
Ste—Detroit Lubricator.
Str—Stromberg Motor Dev. Co.
Ti—Tilloston Mfg. Co.
Zen—Zenith-Detroit Corp.

Fuel Feed

Electric Pump.
Gravity.
I—Mechanical Pump.
Pressure.

ELECTRICAL SYSTEMS

A-Be—Amer, Bosch Magneto Co.
R-Be—Robert Bosch Magneto Co.
Ape—Apollo Magneto Corp.
D-R—Delco Remy Company.
Eis—Eisemann Magneto Corp.
L-N—Lece-Neville Co.
N-E—North East Elee. Co.
Spl—Splitdorf Electrical Co.
I—Generator and Starter at extra cost.
Z—Starter not supplied. Generator at extra cost. extra cost.
3—Starter at extra cost.

CLUTCH

Type

D—Multiple Disk. dp—Double Plate. O—Plate in Oil. P—Single Plate.

Make

B&B—Borg & Beck Co.
B-L—Brown-Lipe Gear Co.
Cla—Clark Equipment Co.
Cov—Covert Gear Co.
D-G—Detroit Gear & Mach. Co.
Ful—Fuller & Sons Mfg. Co.
H-S—Merchant & Evans Co.
Jon—Jones Clutch & Gear Co.
Lon—Long Mfg. Company.
M-E—Merchant & Evans.
M.M.—Mechanies Mach. Co.
Mun—Muncie Products Div.
General Motors Corp.
Rec—Rockford Drill. Machine Co.
W-G—Warner Gear Co.

GEARSET

Make and Model

B-L—Brown-Lipe Gear Co.
Cla—Clark Equipment Co.
Cov—Covert Gear Co.
D-G—Detroit Gear & Mach. Co.
Ful—Fuller & Sons Mfg. Co.
M.M.—Mechanics Mach. Co.
Mun—Muncie Products Div.
General Motors Corp.
W-G—Warner Gear Co.
War—Warner Corp.

UNIVERSAL JOINTS

UNIVERSAL JOINTS

Ble—Blood Bros. Mach. Co.
B-C—Blood and Cleveland.
Cle—Cleveland Steel Prod. Corp.
Har—Spicer Mfg. Co.
M.M.—Mechanics Machine Co.
PeS—Peters and Spicer.
Pet—Peters.
P-S—Peters and Snead.
S-C—Spicer and Cleveland.
Spi—Spicer and Cleveland.
Spi—Spicer and Bood Bros.
SpB—Spicer and Pick.
S-T—Spicer & Thermoid.
U-M—Universal Products Co.
U-P—Universal Products Co.

REAR AXLE Make

Cla—Clark Equip. Co.
Cel—Columbia Axle Co.
Cen—Continental Axle Co.
Eat—Eaton Axle Co.
Sal—Salisbury Axle Co.
Tim—Timken Det. Axle Co.
Wis—Wisconsin Axle Co.

FINAL DRIVE AND TYPE

—Chain.
—Dead.
—Internal Gear.
—Double Reduction.
—Relay—Pendulum Drive.
—Spiral Bevel.
V—Worm.

—Semi-Floating.
—Three Quarter Floating.

WHEELS DRIVEN

2-Forward pair of rear wheels.

4F—Front and forward pair of rear wheels.
4R—Four rear wheels.
6—Six wheels.

FRONT AXLE Make and Medel

Cla—Clark Equipment Co,
Cel—Columbia Axle Co.
Cen—Continental Axle Co.
Eat—Eaton Axle Co.
Sal—Salisbury Axle Co.
She—Sheldon.
Shu—Shuler Axle Co., Inc.
Tim—Timken Det. Axle Co.
Wis—Wisconsin Axle Co.

Y-Chevrolet utility model with dual 30x5 rear tires lists at \$545.00.

*-Commerce and Service models identical with Garford.

(X) General Motors Trucks. Gross vehicle weight indicated for each model in table is the Straight Rating (combined weight of chassis, body, equipment and payload) for which chassis is designed and guaranteed to satisfactorily operate under average conditions. The size of the tires used does not affect this Straight Rating, but to secure maximum tire mileage it is suggested that the total gross weight be limited to a "recommended gross weight" for each tire equipment (type number) based on tire capacity. Chassis prices vary with wheelbase and tire combinations. The range of "recommended gross weights," type numbers and resulting payload range (assuming nominal body allowance) for each model follow.

Note: Models T-15 to T-60 inclusive, as well as Models TX and WX, are available for Export only as coach chassis.

MODEL	RANGE OF RECOMMENDED GROSS WEIGHTS (LBS.)	TYPE NUMBERS	RANGE OF PAYLOAD (TONS)
T-11	3800	1001	14
T-15	5400 to 6500	1501 to 1708	1 2/4
T-17 T-19	5500 to 6500 6500 to 8500	1701 to 1708 2201 to 2223	1 to 2
T-25	6800 to 9000	2501 to 2518	1 to 2
T-30	9000 to 12500	3201 to 3215	134 to 3
TX-1861/4	14000	Export Coach	1/2 00 0
WX-185	14500	Export Coach	
T-42	10600 to 15000	4201 to 4212	2 to 4
T-44	10600 to 16000	4401 to 4412	2 to 41/2
WX-215	17000	Export Coach	
T-60	14500 to 22000	6201 to 6218	21/2 to 6
T-82	15500 to 24000	8201 to 8212	3 to 7
T-90	22000 to 28000	9001 to 9007	5 to 734



CONTINENTAL GASOLINE

		GEN	NERA	AL INFOR	MATION		I	ENGIN	E					YSTE			TRA	NSN	AISS	ION				NING	
MAKE				Tire and			nt Block				Fue Syste						Ge	arset				Bra	kes		
AND MODEL	Tons Capacity	Wheelbase (In.)	Track (In.)	Front (m.m. or inches)	Rear (m.m. or inches)	No. of Cylinders Bore and Stroke	Valve Arrangement Cvls, Cast in One Block	Camshaft Drive	Oiling System (Pressure to)	Water Circulation	Carburetor Make	Fuel Feed	Current Source	Starter Fitted?	Generator Fitted?	Clutch Type	Location	No. Fwd. Speeds	Lever	Universal Joints	Final Drive	Foot Type and Location	Hand Type	Steering Gear Type	Wheels Tyne
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TRUCK CHASSIS



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AND MODEL	Tons Capacity	Wheelbase (In.)	Track (In.)	Front (m.m. or inches)	Rear (m.m. or inches)	No. of Cylinders Bore and Stroke	Valve Arrangement Cyls. Cast in One Block	Camshaft Drive	Oiling System (Pressure to)	Water Circulation	Carburetor	Current Source	Starter Fitted?	Generator Fitted?	Clutch Type	Location	Position of Lever	Universal Joints	Final Drive	Foot Type and Location	Hand Type and Lecation	Steering Gear Type	Wheel Tree
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CONTINENTAL GASOLINE TRUCKS



MAKE AND MODEL		GE	NER	AL INFOR	RMATION			1	ENGI	NE			1	ELE	CTRI YSTE	CAL		TRAN	ISM	iss	ION	1		RUNN		_
				Tire and			at l	Block				Fue		1				Gearse		1			Brakes		e De	
	Tons Capacity	Wheelbase (In.)	Track (In.)	Front (m.m. or inches)	Rear (m.m. or inches)	No. of Cylinders Bore and Stroke	rrangeme		Camshaft Drive	Oiling System (Pressure to)	Water Circulation	Carburetor Make	Fuel Feed	Current Source	Starter Fitted?	Generator Fitted?	Clutch Type	Location	No. Fwd. Speeds	Position of Lever	Universal Joints	Final Drive	Foot Type and Location	Hand Type and Location	Stearing Gear Type	Wheels Type
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ABBREVIATIONS
2C—Two Cycle

 —Main Bearings. B—Battery
b—Lower Rod Bearings
Be—Bevel Gear
C—Center (Gear Lever)
 —Camshaft Bearings
Ch—Chain
CL—Cam and Lever
Cla—Claudel. Co—Cone
Ces—Coxette. CS—Cast Steel
d—Dual
d—Wristpins (Lubrication)
Die—Diesel
e—Timing Gear Case

DR—Double Reduction
Eng—Unit with Engine
ER—External Rear Wheels
ET—External Transmission
F—"F" Head
F—Universals) Fabric
Fab—Fabric
FM—Fabric and Metal
G—Gravity, GE—Gas-Electric
He—Helical Gear
I—Valve in Head
IF—Internal Four Wheels
IFFM—Internal Front and
Middle
IFR—Internal front and rear

IFRT—Internal front rear and trans.

IFT—Internal front and trans.

IG—Internal Ring Gear

IM—Middle

IMR—Middle and Rear

IR—Internal Rear Wheels

IS—Internal 6 wheel

IT—Internal Transmission

L—'L' Head

M—Magneto (Current Source)

M—(Universals) Metal

May—Maybach

Mb—Magneto and Battery

MD—Multiple Disk

Met—Metal
MP—Mechanical Pump
Opt—Optional. Ork—Orkan
Pal—Pallas. Pan—Panhard
Petre—Petroil. Pin—Pinion
P—Pneumatic (Tiree)
Pa—Pump
R—Right (Gearshift Lever)
S—Solid. Sau—Saurer
Sep—Separate Unit
SI—Sleeve Valve
SN—Serew and Nut.Sel—Solex
Sp—Spiash with Pressure
SP—Splash with Pressure
SP—Single Plate. Spl—Splash

St—Straight Bevel
StS—Steel Spoke
Th—Thermo-Syphon
TT—Tractor Truck
V—Vacuum
We—Worm Drive
WS—Worm and Sector
WW—Worm and Wheel
Zen—Zenith
*Specifications of tractor unit
only
\$—All British Trucks are 4-Cyl.
unless noted



BRITISH TRUCKS



		_	1	GEN	ERAL		ENGINE											TRA	NSMISSION			REAR AXLE				-	ELLANEO	
MAKE OF TRUCK		_		_	Tires				ent				Fu Syst			ectri			Gearse		t			Direct	& Loca			
	Load Capacity Long Tons	Wheelbase (Ins.	농	No. of Wheels	Front (Ins.)	Rear (Ins.)	No. of Cylinders	Bore and Stroke (Ins.)	Valve Arrangement	Camshaft Drive	Water Circulatio	Oiling System Pressure to	Carburetor Make	Fuel Feed	Ignition Type	Generator Fitted?	Starter Fitted?	Clutch Type	Location	No.Forw'dSpeeds	Centrel Lever	Туре	Final Drive	Gear Ratio on D	Hand	Foot	Brake Operation	Wheele Twee
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BRITISH TRUCKS—Continued



MAKE OF TRUCK		GENERAL							Engine											TRANSMISSION				XLE	MI	ous .		
					Tires				ent				Fuel System		Electric System						earset			Direct	BrakesType & Location			
	Load Capacity Long Tons	Wheelbase (Ins.)	Track (Ins.)	9	Front (Ins.)	Rear (Ins.)	No. of Cylinders	Bore and Stroke (Ins.)	Valve Arrangement	Camshaft Drive	Water Circulation	Oiling System Pressure to	Carburetor Make	Fuel Feed	Ignition Type	Generator Fitted?	Starter Fitted?	Clutch Type	Location	No.Forw'dSpeeds	Control Lever	Туре	Final Drive	Gear Ratio on D	Hand	Foat	Brake Operation	Wheels Type
Singer Singer Singer Star Fhornycroft Fhornycroft Fhornycroft Fhornycroft Fhornycroft Fhornycroft Fhornycroft Flornycroft Flornycroft Fluing Stevens Fulling Stevens Fullan Vulcan Vulcan Vulcan W. & G. W. & G.	34 11/4 221/2 35 56 31/2 55 10 34 22 31/2 11/2 31/2	115 124 133 174 144 168 174 156 216 201 156 192 126 192 126 143 150 146 127 135	56 59 62 62 74 72 70 66 78 75 74 73 60 64 62 64 56	4 P	29x5 32x6 34x7 32x6 34x7 38x7 40x8 36x8 36x8 36x8 32x6 32x6 32x7 23x4	29x5 32x6 34x7 34x7 34x7 38x7d 40x8d 36x7 36x8 40x8 40x8 40x8d 32x6d 32x6d 32x6d 32x6d 32x6d 32x6d 32x6d 32x6d 32x6d 32x6d 32x6d	64444444444444444444444444444444444444	21/2x33/4 22/4x3/4 31/2x43/4 31/2x43/4 33/4x5 43/4x6 33/4x5 43/4x6 33/4x51/4 43/4x6 33/4x51/4 43/4x51/4 43/4x51/4 43/4x51/6 43/4x51/6 43/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6 33/4x51/6	L. L. L. L. L. L. L. L. L. L. L. L. L. L	ChHelHelHelHelHelHelHelH	ThPuPuPuPuPuPuPu	abce abce abce abc abc abc abc abc abc abc abce abce abce abce abce abce abce abce abce abce abce abce abce abce abce abce abce abce	Zen. Sol	G G G G G G G V G V G G V G G V G V G V G V V G V G V V G V V G V G	B M M M M M M M	Yes. Yes. Yes. Yes. Ex. Yes. Yes. Yes. Yes. Yes. Yes. Yes. Yes	Yes. Yes. Ex. Ex. Ex. Ex. Yes. Yes. Yes. Ex. Yes. Ex. Ex. Yes.	SP. SP. SP. SP. SP. SP. SP. SP. SP. SP.	Eng. Eng. Eng. Eng. Eng. Eng. Eng. Eng.	4 4 4 4 4 4 4 4 4 4 4 4		½F1. FF FF	Wo. Wo. Wo. Wo. Wo.	6.77 6.5 6.42 6.25 7.25 8.25 8.25 7.75 8.25 8.21 10.7 5.70 7.00 7.00 7.20	IRW IRW IRW IRW IRW IRW	IFw IRw ETr ETr IRw IRw IRw IRw IRw IRw IRw IRw IRw IRw IRw IRw IRw	DM Vac Vac DM DM Vac Vac Vac Vac DM Vac DM Vac DM Vac DM Vac DM Vac V	HS. Disl Disl Disl Disl Disl Disl Disl Disl

ABBREVIATIONS:

a—Main Bearings
(Oiling System)
Air—Compressed Air
b—Connecting Rod Big Ends
(Oiling System)
B—Battery
Bev—Bevel
c—Camshaft Bearings
(Oiling System)
C—Central
Ca—Cam

Ch—Chain
C&He—Chain and Helical Gear
CI—Compression Igrition
(Oil Engine)
Cla—Claudel
Co—Cone
C&P—Cone and Plate
d—Wrist Pins (Oiling System)
Dd—Dead Axle
DM—Direct Mechanical
DR—Druble Reduction
e—Front End[Gears or Chain
Eng—Unit*with*Engine

ETr—External Transmission
Ex—Extra
F—In Head and Side
FFF—Full Floating
%FI—Semi-floating
%FI—Semi-floating
G—Gravity
Hel—Helical Gear
HS—Hollow Steel Spokes
Hyd—Hydraulic
I—Overhead
IFw—Internal Four Wheels
IG—Internal Gears

IR w—Internal Rear Wheels
IS w—Internal Six Wheels
L—Valves at Side
M—Magneto
MD—Multiple Disk
P—Pneumatic
Pa—Pump
R—Right Hand
S—Solid Tires
Sep—Separate
Sel—Solex
Sp—Spiral Bevel
SP—Single Plate
T—Valves Both Sides

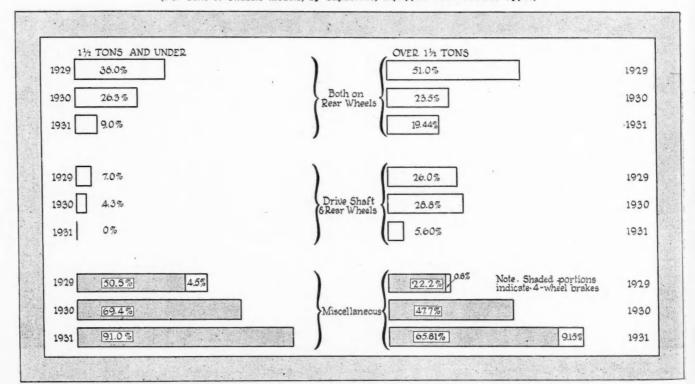
ThS—Thermo Siphon
Tr—Transmission
TI—Tractor Truck
V—Vacuum (Fuel Feed)
Vac—Vacuum Servo
WCS—Web Cast Steel
Wo—Worm
WS—Worm and Segment
WW—Worm and Wheel
Zen—Zenith
2—Driver Beaide Engine
†—Also offered with 95 H.P.
6-cyl. Oil Engine
;—Gas Electric

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American Truck Trends

Service Brake Equipment

(Per Cent of Chassis Models, by Capacities, Equipped With Various Types)





AMERICAN AGRICULTURAL TRACTORS



					GEN	IERA	L									EN	GINE						сьитсн		BELT			DRI	VE		_
MAKE AND MODEL	Price (\$)	Capacity: No. of 14" Plows	Plowing Speed (M. P. H.)	Weight Complete (Lbs.)	*Wheel Base (Ins.)	Minimum Turning Diameter (Ft.)	Ground Clearance (Ins.)	Drawbar Adjustable	Drawbar— Belt Rating	Steering Type	Make	No. of Cylinders	Bore and Stroke (Ins.)	Engine Type	Valve Arrangement	Normal R.P.M. at Plawing Speed	Ignition System Make	ureter	Fuel Recommended	aner	Oiling System Type	Ceeling System Type	TYPE AND MAKE	Diameter (Ins.)	Face (Ins.)	Belt Clutch Type	Ne. Ferw. Speeds Diameter & Face Traction Members (Inc.)	Drive Type to Traction Members	Drive Taken by	Nan-Drive Wheels	Wheel or Truck?
Adv. Rumely W Adv. Rumely Y Adv. Rumely Y Adv. Rumely Z Allis-Chalmers. U Allis-Ch. 20-35	995	5-6 10 3	2.8a 2.8a 2.8a 2.5a 3.33 3.25	7948 11700 16150	80½ 88 98 115 76½ 90½	30½ 34½ 39 45 13	9 & 11½ 12 & 13 & 9 11½ 11½ 11½ 11½ 11½ 11½ 11½ 11½ 11½ 1	H° H H H	20-30 25-40 30-50 40-60	F.A.K F.A.K F.A.K F.A.K S.A F.A.K	Own Own Own Own Cont	2 5 2 5 2 5 4 4 4 4 4	5 1 2 x 7 6 1 2 x 8 1/4 7 1 2 x 9 1/2 9 x 1 1 4 1/4 x 5 4 3/4 x 6 1/2	H H H V V	I I I L	850 750 635 470 1200 930		Own Own Own Kin.	Ker. Ker. Ker.	Don Don Don	MO. MO. H C.	Pu. Pu. Pu. Pu.		21% 25 10	81/4 10 10 71/2	MD MD MD JC No	3	. SG	Hub.	2 2 2 2 2 2	Wh. Wh. Wh. Wh. Wh.
Bates	275	4 0 0 0 7-8	Var.	4850 6500 12200 11600 23250 550	80 80½ 78 78	16 13½ 12 12 14 5	12 12 14 14 15	H H H	18-25 25-35 45-40 35-30 65	F.A.K F.A.K T.D.M. T.D.M. T.D.M.	Beav. Beav. Wauk. Wauk. Wauk. Own. B&S.	4 4 4	5 x614 43/4x614	V	L. L	1000 1000 1000	Bosch. Bosch. Bosch.	Kin. Sch. Sch.	Gas. Gas. Gas.	Pom Pom	HC. HC. HC.	Pu. Pu. Pu.	SP-TDi .	12 12 12 4½	8½ 8½ 8½		2 56-10 2 56-10 3 78-14 3 78-12 98-18 1 25-314	8G 8G 8G 8G	Axle. Axle. Axle. Axle. Axle.	2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ir Ir Ir Ir Ir Wh
Case	1100 1450 1900 2375	2-3 2 2-3	Var. Var. Var. Var. 2.6 2.6 2.6 2.6	4296	66 51 54½ 57 61	111/2	9½ 10½ 12 13	H	10-14 15-20 20-25 2 5-30	F.A.K. F.A.K.°	Own Own Own Own Own	4 4 4 4 4 4 4	45%x6 31%x51/2 31%x51/2 31%x51/2	V V V V V V	I I I L I	1100 1100 1100 1100 1500 1250 1100 850	Eise Eise Eise	Ens. Ens. Ens. Ens.	Gas.	Own Own Own Own Vor Vor Vor	HC. HC. HC. HC. HC. HC.	Pu. Pu. Pu. Pu. Pu. Pu. Pu.	SP SP	10½ 11⅙ 12	8½ 6¼ 6¼ 6¼ 6½ 6½ 6½ 8½	SI.G SI.G SI.G SI.G SI.G	1	Cha. Cha Cha SG SG SG	Axle. Axle. Axle. Axle. Axle.	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	Wh. Wh. Wh. Ir. Ir. Ir.
DoallPT DoallPC Eagle6A EagleH EagleH EagleE	1295	3-4 3-4 4-5 3-4	2.63 2.63 3.33 2.00 2.00 2.00	3250 3075 4700 6800 7100 7800	103 80 88 91 84	15 15 16 14	32 10 17 17 1134	у° Н Н	16-30 20-40 20-35	F.A.K F.A.K F.A.K F.A.K	Wauk. Wauk. Her. Own. Own.	6	8 x10 8 x9	V	L I I	1200 1416 450 450 450	A.Bos. Dixie Dixie Dixie	Zen. Seh. Sch. Sch.	Ker. Ker. Ker.	Vor Own Own	HC. MO. MO. MO.	Th. Pu. Pu. Pu. Pu.	MD-TDi DP-TDi ES-Own ES-Own	16 24 24 24	6½ 8 10 10	No No ES ES	3 2 52-12 2 52-12 2 48-14	SG SG SG SG	Axle. Axle. Spks. Rim Rim Axle.	2 2 2	Wh. Wh. Wh. Wh.
Fordson	2185	2 2 4	2.00 2.81 2.24 3.00 3.33	3112 3112 6900 4800	63 63 140	21 21 341/2 28	11½ 11½ 18	H H N	14–26 14–26 25–50	F.A.K	Own Own Wauk.	4	8 x10 41/8x5 41/8x5 5 x61/4 53/4x61/2	v v	L	1100 1100 1000		Zen Kin. °Str	Gas. Ker. Gas.	Own Own Ben	CS	Pu Pu Pu	Own Co-Own	9½ 9½ 9½ 11%	6½ 6½ 8½	SI.G SI.G Co	2 52-18 3 42-12 3 42-12 2 54-54 3 46-10		Axle. Axle. Axle. Rim.	2 2 2 2	Wh. Wh. Wh.
Hart-Parr 18-36 Hart-Parr 28-50 Huber 20-40 Huber 25-50 Huber Light 4		3 4 4 5 4 3-4	3.25 3.2 2.25 2.25 3.08 3.41	6100 8600 8200 8500 5600	83 91 93 93 81	32 32 30 30 7½ 27	113% 113% 14 14 11	H U U H°	18-36 28-50 32-45 40-62 20-36	F.A.K F.A.K F.A.K F.A.K F.A.K	Own Stea Stea Wauk.	2 4 4 4 4 2	6¾x7 5¾x6½ 5½x6½ 5½x6½ 4¾x6¼ 6¾x7	H V V	I I I	1000 1000 1150	Bosch.	Zen. Zen. Zen.	Gas. Gas. Gas.	Don Don Pom Pom	MO. MO. HC. HC. HC.	Pu. Pu. Pu. Pu. Pu.	SP-Own	17	9 8 9 8 ³ / ₈ 8.5	SP SP M D M D	3 51-12 2 51-14 2 56-18 2 56-20 2 50-14 2 46-12	SG SG SG SG	Hub. Hub. Axle. Axle. Axle.	22222	Wh. Wh. Wh. Wh. Wh.
John Deere GP John Deere WT LaCresse H *Lausen 6T1 *Lausen 6T1	750	3 3-4	2.88 2.97 3.50 3.3a 3.5 3.25	3964 4000 10500 5550	88 105 84	16 15 32 30	9 9	U U	12-24 22-35	F.A.K F.A.K F.A.K F.A.K F.A.K	Own Own Wisc	2 6 6 4	6 x6 6 x6 378x5 412x6 412x6	H V V V	L I I	950 850 1300 1050	K-K A.Bos. ABos.,	Kin. Til. Til.	G-K Gas.	Ben Pom Pom	MO. HC. HC.	Pu. Pu. Pu.	TDi-Own. TDi-Own. FD-Own ES-Own MD-TDi. ES-TDi.	10½ 16 18	6½ 8 8 8½	T Di T Di ES No No	3 42¾-1 3 44-10 1 2 54- 2 48-12	SI	Hub. Hub. Rim. Hub. Hub. Hub.	2 2 2 2	Wh. Wh. Wh. Wh. Wh.
McC-Deer. 10-21 McC-Deer. 15-30 McC-Deer. 5-30 McC-D. Farmal Mead-Morr. 556 Mead-Morr. 80/ Monarch. 70 Monarch. 350 Monarch. 350	5 5350	2 4 6 12 8	3.00 3.01 3.2 2.80 3.00 3.00 2.6 2.82 2.76	3920	78 95 56 64 91 91	16 28 33 10 16 12 16			10-20	S.A. F.A.K. F.A.K. T.D.M S.A. T.D.M T.D.M T.D.M T.D.M T.D.M	Own		334x5 414x5 434x6 414x5 334x5 434x61 512x7 634x7 514x61 434x61	V V V V V V V	Ĭ.:	1000 1050	Own Eise Eise	Own Own Own Sch. Zen. Zen. Zen.	Ker. Ker. Gas. Gas.	Own Own Own Pom Pom Pom	CS. CS. CS. HC. HC. HC.	The Pu. The Pu. Pu. Pu. Pu.	SP-Own SP-Own SP-Own SP-Own MD-Own. MD-Own SP-Own SP-Own	16% 151/4 14 12 12 141/6 12	9 7 6½ 9 8½ 11 8¾	SP SP SP	1 3 3 3 -15	SGE SI Cha	Axle. Axle. Rim. Hub. Hub.	2 2 0 0 0 0 0	Wh. Wh. Tr. Wh. Tr. Tr.
Oliver H-P. Oliver H-P 18-2; Oliver H-P3-; Rock Island . G- Rock Island . F/	1025	2-3 3-4	3.2 3.2 3.3 2.75 2.85 2.50	420 470	0 80 80 721 0 80 0 73 0 76	24 27 28 20 22 22	13¼ 9¾ 10¼	H. H°	18-27 18-28	F.A.F., F.A.K., F.A.K., F.A.K., F.A.K., F.A.K.,	Own. Own. Own.	4 4	4½x5½ 4½x5½ 4¾x6½	V V	I.	1150 1190 1125	A.Bos. A.Bos. A.Bos. Split.	Ens. Ens. Ens. Str.	G-K G-K	Don	HC.	Pu. Pu.	SP-B&B SP-B&B SP-B&B SP-TDi SP-TDi	1634 16 18	81/4 61/2 73/9	JC JC SI.G SP SP	1 1 1 2 46-11 2 48-12	SG. SG. SG.	Axle. Axle. Axle. Axle.	2 2 2 2	Wh. Wh. Wh. Wh.
Ivin CityK' Ivin City 17-2 Ivin City 27-4 Ivin City 21-3	8	2 3 5-6 3-4	1	430 535 920 588		241/ 28 30 28 28	21 934 1334	H H	11-20 17-28 27-44 21-32	F.A.K. F.A.K. F.A.K. F.A.K.	Own. Own. Own. Own.	4 4 4	4½x5 4½x6 5½x6% 4½x6	V V V	I. I. I.	. 1000 1075 900 1075	ABos. ABos. ABos. ABos.	Sch. Sch. Sch. Str.	Gas. Gas. Gas.	Don Don Don	HC. HC. HC.	Pu. Pu. Pu. Pu.	SP-TDi SP-TDi SP-TDi DP-TDi	14 16 21 16	7 714 814 71/2	No. No. No. No.	2 50-12 2 60-20 3 50-12	SG. SG. SG.	Axle. Axle. Axle. Axle. Axle. Axle.	2 2 2	Wh. Wh. Wh. Wh.
Wallis. 12-2 Velmore 12-2 Velmore 12-2	0 868 5 1056 . 4500	3	3.33 3.25 3.50 2.08	345 290 300 300 998	0 78 0 72 0 72 0 72 0 109	15 15	10 12½ 12½	H H	12-20 12-20	F.A.K. F.A.K. F.A.K.	Own.		37/8x51/33/4x51/4 x53/4x7			1				4			MD-TDi MD-TDi MD-Ful MD-Ful		614	No.		IG.		2 2 2	Wh. Wh. Wh.
- 1930 Specific - Others Used - Average - Average - Be American - K Atwater 1 - M Air Maze - Beaver - Bennett - AS Briggs an	ations also Bos Kent	ch	Con CS- Dis- Don DP- DS- Eise	-Cha-Cone t-Cone t-Co -Circ -Dist -Do -Dou -Dril -Eis -Ens	ntine ulatin illate naldsc ible P led Sl eman	g Spl on late naft n		F. F. G. G. H. H.	A.F.— A.K.— D.—Fin al—Fu -K.—G as—G —Hor .B.—H C.—He	end Eng Front A Front A ing Dru iller asoline asoline isontal landle B bllow Cra ercules	xle Fork xle Kno m and Ker	oser	e JG Ke Ki ne L- Le M	Ja er—I n—I -"L m— eC-L	tern W (Kero King " Ho Lem Deer Mul	al Ge Clutch sene ston ead alay —Mo Deer tiple l	Cormie	k-	N—N Opt— Pom- RBos S.A.— Sch— SG—	Option Pomo Pump Robe Swing Schebl	oiler al na ert Bo ing A: er ear	sch kle	SI.4 SP- Spli Spli Ste Str TD	S—Sing Sing N—Sp N—St Stro I—Tw	ding le Pla lokes litdor sarns omber in Di Thru Me	Gea ate rf rg isc isc isc isc	ring	Fr—Tr U—Un V—Ver Var—V Vor—V Wauk- Wh—V	acks iversall tical aries ortox Waul Vheel Wisco Vorm	ly kesh	



BRITISH TRUCKS—Continued



			C	ENE	RAL						Er	ngine						TRA	NSMI	SSIC	N	REA	R A	KLE	MI	SCELL	ANE	OUS .
MAKE					Tire	es			nt				- Fu Syst			ectrica System			Ge	earset				Direct	Brakes & Loc			
OF TRUCK	Load Capacity Long Tons	Wheelbase (Ins.)	Track (Ins.)	5 0	Front (Ins.)	Rear (Ins.)	No. of Cylinders	Bore and Stroke (Ins.)	Valve Arrangement	Camshaft Drive	Water Circulation	Oiling System Pressure to	Carburetor Make	Fuel Feed	Ignition Type	Generator Fitted?	Fitted?	Clutch Type	Location	No.Forw'dSpeeds	Control Lever	Type	Final Drive	Gear Ratio on Di	Hand	Foat	Brake Operation	Wheels Type
Singer Singer Singer Singer Star Thernycroft Thernycroft Thornycroft Thornycroft Thornycroft Thornycroft Thornycroft Thornycroft Thornycroft Thornycroft Thornycroft Tilling Stevens Tilling Stevens Yulcan Yulcan Yulcan Vulcan Wulcan Wulcan Wulcan Wulcan Wulcan	34 114 21/2 21/2 3 5 6 31/2 5 5 10 3 4 2 2 11/2 3	146	56 59 62 62 74 72 70 66 78 75 74 73 60 64 62 64 56	4 P. 4 P. 4 P. 4 P. 4 P. 6 P. 6 P. 4 P. 4 P. 4 P. 4 P. 4 P. 4 P. 4 P. 4	40x8 36x7 36x8 36x8 40x8 36x6 36x6 32x6	29x5 32x6 34x7 34x7 34x7 38x7d 40x8d 36x8 36x8 40x8 36x8 40x8 32x6d 32x6d 32x6d 32x6d 32x7d 32x6d 32x7d 32x6d 32x7d	6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	21/2x33/4 22/4x3/4 31/2x43/4 31/2x43/4 31/2x43/4 43/4x6 33/4x5 43/4x6 43/4x6 33/4x5 43/4x6 33/4x6 43/4x6 33/4x6 43/4x6 33/4x6 43/4x6 33/4x6 43/4x6 33/4x6 43/4x6 33/4x6 43/4x6 33/4x6 43/4x6 33/4x6 43/4x6 33/4x6 43	L L L L L L L L	Ch Ch Hel Hel Hel Hel Hel Ch Ch Ch Ch	Th. Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu. Pu	abce abce abc abc abc abc	Sol Sol Sol Zen. Zen. Zen. Zen. Zen. Zen. Sol	G G G G G V G V G V G V G V	B B M . M . M . M . M . M . M . M . M .	Yes. Nyes. Ryes. HEx. HEx. HEx. HYes. Nyes. Ryes. Nyes. Yes. Yes. Zx. Zx. Zx. Zx. Zx. Zx. Yes. Zx. Zx. Zx. Zx. Zx. Zx. Zx. Zx. Zx. Zx	SP. SP. SP. SP. SP. SP. SP. SP. SP. SP.	Eng. Eng. Eng. Eng. Eng. Sep. Sep. Sep. Eng. Eng.	400400		12F1 12F1 FF FF 12F1 FF FF FF FF FF FF FF FF FF FF	Sp Wo	6.77 6.5 6.42 6.25 7.21 8.21 7.71 8.21 8.21 10.7 5.71 9.66 7.00 7.00 7.22	IRW IRW IRW IRW IRW IRW IRW IRW IRW IRW IRW IRW IRW IRW IRW IRW IRW	IRW. ETr ETr IRW. IRW. ITr IRW. IRW. IRW. IRW. IRW. IRW. IRW. IR	DM Vac Vac DM DM Vac Vac Vac DM Vac DM Vac DM Vac DM Vac DM Vac V	HS Disk.	

ABBREVIATIONS:

- a—Main Bearings
 (Oiling System)
 Air—Compressed Air
 b—Connecting Rod Big Ends
 (Oiling System)
- (Oiling System)
 B—Battery
 Bev—Bevel
 c—Camshaft Bearings
 (Oiling System)
 C—Central
 Ca—Cam
- Ch—Chain
 C&He—Chain and Helical Gear
 CL—Compression Ignition
 (Oil Engine)
 Cla—Claudel
 Co—Cone
 C&P—Cone and Plate
 d—Wrist Pins (Oiling System)
 Dd—Dead Axle
 DM—Direct Mechanical
 DR—Dcuble Reduction
 e—Front EndjGears or Chain
 Eng—Unit*with*Engine

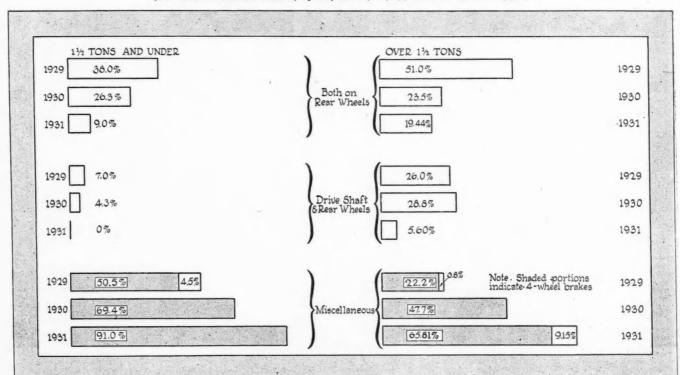
- ETr—External Transmission
 Ex—Extra
 F—In Head and Side
 FFF—Full Floating
 %FI—Semi-floating
 %FI—Semi-floating
 G—Gravity
 Hel—Helical Gear
 HS—Hollow Steel Spokes
 Hyd—Hydraulic
 I—Overhead
 IFw—Internal Four Wheels
 IG—Internal Gears
- IRw—Internal Rear Wheels
 ISw—Internal Six Wheels
 L—Valves at Side
 M—Magneto
 MD—Multiple Disk
 P—Pneumatic
 Pu-Pump
 R—Right Hand
 S—Solid Tires
 Sep—Separate
 Sol—Solex
 Sp—Spiral Bevel
 SP—Single Plate
 T—Valves Both Sides

- ThS—Thermo Siphon
 Tr—Transmission
 TT—Tractor Truck
 V—Vacuum (Fuel Feed)
 Vac—Vacuum Servo
 WCS—Web Cast Steel
 Web—Worm
 WS—Worm and Segment
 WW—Worm and Meel
 Zen—Zenith
 "—Driver Beside Engine
 †—Also offered with 95 H.P.
 6-cyl. Oil Engine
 †—Gas Electric

American Truck Trends

Service Brake Equipment

(Per Cent of Chassis Models, by Capacities, Equipped With Various Types)



01

AB



AMERICAN AGRICULTURAL TRACTORS



					GEN	ERAI	L									ENC	SINE					_	CLUTCH		ULL		_		DRIV	E	
MAKE AND MODEL	Price (\$)	Capacity: No. of 14" Plows	Plowing Speed (M. P. H.)	Weight Complete (Lbs.)	*Wheel Base (Ins.)	Minimum Turning Diameter (Ft.)	Ground Clearance (Ins.)	Drawbar Adjustable	Drawbar— Belt Rating	Steering Type	Make	No. of Cylinders	Bere and Stroke (Ins.)	Engine Type	Valve Arrangement	Nermal R.P.M. at Plewing Speed	Ignition System Make	Carbureter Make 64	Recommended S	aner .	Oiling System Type	Caeling System Type	TYPE AND MAKE	Diameter (Ins.)	Face (Ins.)	Belt Clutch Type	No. Forw. Speeds	Diameter & Face Traction Members (Ins.)	Drive Type to Traction Members	Drive Taken by	Nen-Drive Wheels
RumelyW RumelyX RumelyY RumelyZ s-Chalmers.U s-Ch.20-35	995	5-6 10 3	2.5a	7948 11700 16150	98	39 45	12 to	H	30-50 1 40-60 1	F.A.K F.A.K F.A.K F.A.K S.A	Own Own Own Own Cont	2 2 2 2 2 4 4 4	618x7 618x814 718x912 9x11 114x5 134x612	H H H V V	[[[[635 470 200		Own H	Cer. I Cer. I	Don Don Don	MO. MO. H C.	Pu. Pu. Pu. Pu.		25 10	81/4 10 10 71/2	MD MD MD JC No	3 3 4		SG SG SG SG IG	Hub. Hub. Hub. Axle.	2 W 2 W 2 W 2 W 2 W
es	275	0 0 7-8	Var.	12200 11600 23250 550	80½ 78 78	12 12 14 5	12 14 14 15	H H H	25-35 45-40 35-30 65	F.A.K T.D.M. T.D.M. T.D.M. H.B	Beav. Beav. Wauk. Wauk. Wauk. Own. B&S.	4	11/4x6 11/2x6 5 x61/4 13/4x61/4 61/2x7 31/4x41/2 21/2x21/2	V V V V V	I.	1000 1000 1000 1000	Bosch. Bosch. Bosch.	Kin. (Seh. (Seh. (Str (Kin. (185. 185. 185.	Pom Pom Pom Pom	HC. HC. HC.	Pu. Pu. Pu. Pu. Th.	SP-TDi .	12 12 12 4½	81/2	SP SP No	333	78-14 78-12 98-18	SG SG	Axle. Axle. Axle. Axle. Axle. Axle.	2 TO TO TO TO TO TO TO TO TO TO TO TO TO
CO CO CO CO CO CO CO CO CO CO CO CO CO C	1900 2375		Var. Var. Var. Var. 2.6 2.6 2.6 2.6		66 89 66 51 54½ 57 61	113/2	914 1078 12 13	H H H H	10-14 15-20 20-25 25-30	F.A.K. F.A.K.° F.A.K. T.D.M. T.D.M. T.D.M. T.D.M.	Own Own Own	4 4 4 4	45/8x6 37/8x51/2 37/8x51/2 37/8x51/2	V V V V V	I I I L	1100 1100 1500 1250 1100	Eise Eise Eise Eise	Ens. Ens. Ens. Ens.	Gas.	Own Own Own Vor Vor Vor Vor	HC. HC. HC. HC. HC.	Pu. Pu. Pu. Pu. Pu. Pu.	SP- SP- SP-Own. SP-Own. SP-Own. SP-Own.	13 10¼ 10¼ 10¼ 9½ 10½ 11⅓ 12 15¾	6½ 6½ 8½		1 1		Cha Cha SG SG SG	Axle.	2 W 2 W 2 W 2 T 2 T 2 T 2 T
e 6A	1295	3-4 3-4 4-5	2.63 2.63 3.33 2.00 2.00 2.00 2.00	3250 3075 4700 6800 7100 7800 8150	80 88 91 84	Var. Var. 15 15 16 14 17	32 10 17 17 1114	H	16-30 20-40 20-35	F.A.K T.D.M. F.A.K F.A.K F.A.K F.A.K F.A.K	Her Own Own	4	8 x10 8 x9	V	L L I	1200 1416 450 450 450	A.Bos. Dixie Dixie Dixie	Zen. Zen. Seh. Seh. Sch.	Ker. Ker.	Vor Own Own	HC. MO. MO. MO.	Th. Pu. Pu. Pu. Pu.	MD-TDi.	10 10 16 24 24 24 24 24		No No ES ES ES	3 2 2 2	52-12 52-12 48-14 52-18	SG		2 W 1 W 2 W 2 W 2 W 2 W
son		2 2	2.81 2.24 3.00	3112 3112	63 63	21 21 341/4	111/8	Н Н	14-26 14-26	F.A.K F.A.K	Own	4	4½x5	V V	L L	1100 1100	RBos RBos RBos	Zen Kin.	Gas. Ker.	Own	CS	Pu Pu	Own Own Co-Own	91/2	61/	Sl.G Sl.G	3	42-12 42-12 54-54	Wo. Wo.	Axle. Axle. Rim	2 V
t-Parr. 12-24 t-Parr. 18-36 t-Parr. 28-56 par 20-46 per 25-56 per. Light		3 4 4 5	3.33 3.25 3.2 2.25 2.25 3.08	8600 8200 8500 5600	0 83 0 91 0 93 0 93 0 81	28 32 32 30 30 71/2	113/1 14 14	H U U	18-36 28-50 32-45 40-62	F.A.K F.A.K F.A.K F.A.K F.A.K	Own Stea	4 4 4	534x614 634x7 534x614 514x614 434x614	III	IT I	800 850 1000 1000 1150	Eise Eise Bosch.	Sch. Sch. Zen. Zen. Zen.	Ker. Ker. Gas. Gas.	Don Don Pom Pom	MO. MO. HC. HC.	Pu. Pu. Pu. Pu. Pu.		14 14 1514 1514 17	8%	SP. SP. M D M D	2 2 2	46-10 51-12 51-14 56-18 56-20 50-14	8G 8G 8G	Hub. Hub. Hub. Axle. Axle.	2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7
n Deere I n Deere GF n Deere W1	75		3.41 2.88 2.97 3.50	380 396 400	2 69½ 6 70½ 4 78♣ 0 90	16 16 151	10 22 22 22	U U H	12-24	F.A.K. S.A	Own.	2	6 x6 6 x6 6 x6	H H	L L	950 950 850	Split Own Own K-K A.Bos.	Sch. Ens. Kin.	G-K G-K	Don Don	HC. HC.	Th. Th.	MD-Own. TDi-Own. TDi-Own. FD-Own. ES-Own.	13	61/	M D T D T D ES.	i 3	46-12 4234-10 44-10	Cha Cha	Hub.	2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7
auson6S auson6T1 ausonS cC-Deer10-2 cC-Deer15-3 cC-Deer2 cC-D. Farma aad-Morr55 ead-Morr50 enarch7 enarch7 enarch	0 0 0 11 5 535 0 354	3-4 2 2 3 2 2 4 6 0 12 0 8	3.00 3.01 3.2 2.80 3.00 3.00 2.6	1050 555 365 392 654	0 105 0 84 0 85 0 78 0 85 0 64 0 87 10 84		10½ 10½ 15½	NU. HHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH	25-45 20-35 10-20 22-36	F.A.K. F.A.K. F.A.K. F.A.K. F.A.K. T.D.M S.A T.D.M T.D.M T.D.M T.D.M	Le Ro Le Ro Own. Own. Own. Own. Own. Her. Le Ro Own.	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	376x5 414x6 414x6 384x5 414x5 434x6 414x5 334x5 434x6 512x7 634x7 1514x6 434x6	V V V V V V V V	I I I I I I I I	1050 1100 1200 1000 1050 1000 1200 1200	ABos ABos Own Own Own Own Eise Eise Eise	Til Own Own Own Own Own Sch. Zen. Zen.	Gas. Ker. Ker. Ker. Gas. Gas.	Own. Own. Own. Own. Own. Pom. Pom. Pom.	HC. HC. CS. CS. CS. HC. HC. HC.	Pu. Pu. Th. Th. Pu. Pu. Pu. Pu. Pu. Pu.	MD-TDi ES-TDi	18 16 14 15½ 16¾ 15½ 14 12 12 14½ 12	81 8 63 7 63 9 83 611	No. No. SP. SP. SP. SP. SP.	33311333	54- 48-12 40-6 42-12 50-12	SG SB SB SGB SGB SGB SI Cha	Hub. Hub. Axle. Axle. Axle. Axle. Axle. Rim. Hub. Hub. Hub.	0
iver H-P iver H-P 18-2 iver H-P3- ck Island G-	8 102 5 132	5 3-5	3.2		00 80 4 50 72 3 00 80	24 27 28 20 22	103	U.	. 15-2	F.A.F. F.A.K. F.A.K.	. Own.	1	41/8x51 41/8x51 43/4x61 41/4x53	1			1			Don.	HC.	. Pu	SP-B&B. SP-B&B. SP-B&B. SP-TDi.	. 163	6	JC. JC. Sl.	. 1 G		SG. SG. SG.	Axle Axle Axle	1 2 2 2
ck Island ck IslandF vin CityK vin City17-2 vin City27-4 vin City21-3	Α	1	2.8 2.5 3.1 2.9 2.9 3.1	0 470	76 00 76 00 783 50 84 00 97 80 84	22	133	SH.	18–3 11–2 17–2 27–4	F.A.K. F.A.K. F.A.K. F.A.K. F.A.K. F.A.K.	Buda Own Own Own		4 4 4 x 5 4 4 4 x 6 4 4 4 x 6 4 5 4 x 6 4 4 5 x 6	V. V. V. V.	I. I. I.	1000 1078 1078	ABos.	Str. Sch Sch	Gas Gas Gas	Don. Don. Don.	. HC . HC	Pt. Pt.	SP-TDi. SP-TDi. SP-TDi. SP-TDi. DP-TDi.	. 14 . 16 . 21	7 7 8	SP SP No No No No No		46-11 48-12 3 42-10 2 50-12 2 60-20 3 50-12	SG. SG. SG.	Axle Axle Axle Axle Axle Axle Axle	2 2 2 2
Vallis Certifie Vallis12-2 etmore12-2 etmore12-2	20 86 20 86 25 108	3 2 35 2	3.3 3.3 3.2 3.5	3 43: 3 34: 5 290 0 300	15 84 50 78 00 72 00 72	28 23 15 15	13 10 12 12 12	HHHHHHH	20-3 12-2 12-2 12-2	0 F.A.K 0 F.A.K 0 FK 5 F.A.K	Own Own Waul		4 43/6x5 4 37/8x5 4 33/4x5 4 4 x5	V. V. V. V. V.	I. I. I. L.	. 100 100 110 110 105	Bosch Bosch Split.	Kin Kin Sch	G-E	Own. Own. AM None	CS HC	Po Po	MD-TD MD-TD MD-Ful MD-Ful MD-Ful	i 19 i. 17 12 12	7 6 7	M 14	D :	48-12 3 46-10	SG. IG. IG.	Axle Spks Spks	2 2 2

•—1930 Specifications
•—Others Used also
a—Average
ABes—American Bosch
A-K—Atwater Kent
AM—Air Maze
Bav—Beaver
Ban—Bennett
B&S—Briggs and Stratton

Co—Cone
Cont—Continental
CS—Circulating Splash
Dis—Distillate
Des—Donaldson
DP—Double Plate
DS—Drilled Shaft
Eise—Eisemann
Ens—Ensign
ES—Expanding Shoe

F.A.F.—Front Axle Fork
F.A.K.—Front Axle Knuckle
F.A.K.—Front Axle Knuckle
F.D.—Fring Drum
Ful—Fuller
G.K.—Casoline and Keroeene
Gas—Gasoline
H.B.—Handle Bars
H.B.—Handle Bars
HC—Hollow Crankshaft
Her—Hercules

IG—Internal Gear
JC—Jaw Clutch
Ker—Kerosene
Kin—Kingston
L—"L" Head
Lem—Lemlay
McC-Deer—McCormick—
Deering
MD—Multiple Dry Disc
MO—Multiple Disc in Oil

ical Oiler
N—None
Opt—Optional
Pem—Pomona
Pu—Pump
RBes—Robert Bosch
S.A.—Swinging Axle
Sch—Schebler
SG—Spur Gear
SGB—Spur and Bevel Gear

Tr-Tracks
U-Universally
V-Vertical
Var-Varies
Vor-Vortox
Wauk-Waukesha
Wh-Wheel
Wisc-Wisconsin
Wo-Worm
Zen-Zenith





AMERICAN STOCK

					ins.)		ion	CYLII		CRA	NKCA	SE		VAL	VES		FRO END I				PISTO	ONS		
MAKE		ders, Bor	(.c.c.)	une une	ent (Cu. Ins.)	.e	Suspension		Piece	Upper	Half	Half)			(Ins.)			-			s, Ozs.	Pisten I	ins	ber
MODEL	Designed Fer	Number of Cylind and Stroke (Ins.)	Rated H.P. (N.A.C.C.)	R.P.M. at Maximun Brake H.P.	Piston Displacement	Compression Ratio	Number of Point	Head	Ne. Cast in One	Integral with Cylinders?	Material	Material (Lower	Arrangement	Head Material	Clear Diameter (Lift (Ins.)	Туре	Non-Metallic Gear Used On?	Material	Length (Ins.)	Weight (with Pins Rings & Bushings)	Diameter and Length (Ins.)	Pin Bearing In	Number of Rings Pisten
Buda Hivelo. H-19; Buda Hivelo. H-26; Buda Hivelo. H-26; Buda Hivelo. H-29; Buda Hivelo. H-29; Buda Hivelo. H-29; Bufalo. B. H. Bufalo. B. H. Bufalo. B. H. Bufalo. GAT Bufalo. GAT Bufalo. GAT Bufalo. GAT Bufalo. GAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT Bufalo. SAT SAT Bufalo. SAT	T & Tr. Buses & Trucks Buses & Trucks Buses & Trucks Buses & Trucks Buses & Trucks Buses & Trucks Trucks Trucks Trucks Trucks Trucks Trucks Trucks Trucks Tractors T	4-5-2x8 4-6-2x8 4-6-2x8 4-7-2x8 4-7-2x8 4-7-2x8 4-7-2x8 4-7-2x10 4-4-2x5 6-4-2x5 6-4-2x5 6-4-2x5 6-4-2x6 4-1-2x6 32.40 48.60 48.60 22.50 25.60 25.60 26.50 28.90 32.40 40.00 32.40 40.00 32.40 40.00 32.40 40.00 32.40 40.00 32.40 40.00 32.40 40.00 32.40 40.00 32.40 40.00 32.40 40.00 32.40 40.00 40.60	48-800 62-675 75-540 100-500 70-1800 70-1800 77-1800 150-2000 114-2200 37-1850 43-1800 48-1850 60-1700 50-1400	665.2 (1988) 6 (1988)	$\begin{smallmatrix} 244.00.6 \\ 4.00.2 \\ 3.2 \\ 4.4.0 \\ 3.2 \\ 3.2 \\ 3.2 \\ 3.3 $	# 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Det. De	11114333364444466666226464666642222222222	Sep. Sep.	Iron. Iron. Iron. Iron. Iron. Iron. Iron. Iron. Al. Al. Al. Al. Iron. Ir	Iron. Al. Al. Al. Iron.		Sal Sal Sal	1.53 1.53 1.53 1.53 1.53 1.94 4.00 4.00 4.00 4.00 4.00 4.00 2.87 2.50 2.52 2.55 2.25	44 56 68 37 37 31 42 43 44 44 44 44 44 44 44 44 44	Spur-Spur-Spur-Spur-Spur-Spur-Spur-Spur-	None. None. None. None. None. None. None. None. Idler. Idler. Idler. Idler. Idler. Idler. Idler. None.	CI. CI. CI. CI. CI. CI. CI. CI. CI. CI.	9.00 12.31 5.50 12.31 5.50 6.25 4.50 6.25 4.50 6.25 6.25 6.75 6.25 6.25 6.25 6.25 6.25 6.25 6.25 6.2	100.0 548.0 752.0 548.0 93 42 42 64 81 97 142 64 46 0 47 172 196 47 172 196 47 174 48 172 196 5 18 197 14 14 14 196 120 5 5 18 19 11 14 15 18 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	11.50x4.49 11.50x3.72 71.25x3.43 11.25x3.43 11.25x3.45 11.25x3.45 11.25x3.45 11.25x3.45 11.25x3.45 11.25x3.45 11.25x3.45 11.25x3.65 11.25x3.65 11.25x3.65 11.25x3.65 11.50x3.55 11.75x4.76 11.50x3.55 11.50x3.56 11.50x	Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Rod. Pist. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Pist. Rod. Rod. Pist. Rod. Rod. Pist. Rod. Rod. Pist. Rod. Rod. Pist. Rod. Rod. Rod. Rod. Rod. Rod. Rod. Rod	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	

ABBREVIATIONS:
a—Main Bearings.
Acca—Accesories Drive.
AI—Aluminum Alloy.
AIs—Aluminum Steel with Strut.
ASt—Alloy Steel.
b—Connecting Rod Bearings.
B—Buses

Ball—Ball Bearing.
c—Camshaft Bearings.
C—Cars.
Cam—Camshaft.
Car—Carbon Steel.
Cent—Centrifugal.
ChN—Chrome Niekel Steel
Chr—Chromium Steel.

ChVa—Chrome Vanadium.
C&H—Chain and Helical Gear.
CI—Cast Iron.
Crac—Crankshaft and Accessories.
Cran—Crankshaft.
d—Wrist Pins.
Det—Detachable
Dur—Duralumin.

e—(Oiling System)—Timing Gear Case
e—Exhaust.
Ece—Eccentric.
f—Rocker Arm.
Flo—Floating
Heli—Helical.
I—Both valves in head.
Ie—Valve in Head; overhead camshaft.

Int L-Mi Nie Nie Nie Op

ENGINES





		DS	NG			CI	RANKSHA	FT			OILI		WAT	ER ATION	Go	VERN	OR		MISC	ELLAN	EOU	S			
			Bush- Ozs.				Crank Pin		Main Bearin								peu	Aaxi-	Carbu- Lbs.			erall l			MAKE AND
Material	Center to Center		Weight (with Buings and Cap) O	Material	Offset (Ins.)	Counter Balances Used?	Diameter and Length (Ins.)	Number	Diameter Length (Pressure to	Pump Type	Туре	Pump Type	Furnished?	Type	Maximum Governed Speed (R.P.M.)	Speed at which N mum Torque is L veloped (R.P.M.)	Weight (without retor or Ignition)	Adapted for Use of Kerosene?	Width	Height	Length	Bell Housing Provided? S.A.E. Numbers	MODEL
t r r t	9 9 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 . 12 4 . 00 9 . 00 1 . 00 9 . 00 1 . 00 0 1 . 00 0 1 . 00 0 1 . 00 0 1 . 00 0 1 . 00 0 . 1 . 00 0 . 1 . 25 1 . 25 2 . 25 3 . 25 2 . 25 3 . 25 2 . 25 3 . 2	144.0.0 240.0.496.0 728.0 728.0 138.6 57.2 92.2.2 138.6 133.7 239 239 148.0 67 239 239 163 67 227.2 227.2 227.2 227.2 227.3 35.2 35.2 35.2 35.2 35.2 35.2 35.2 35	ChN. Car. Car. Car. Car. Car. Car. Car. Car	None None None None None None None None None None None None None	No No No No No No No No No No Yes No Yes No Yes	2.25x1.50 2.25x2.75 3.00x3.50 3.00x3.50 3.00x3.50 2.50x2.00 2.50x2.00 2.50x2.00 2.50x2.00 2.20x2.20x	75555333743333334444444333355577773555777735557777333337433337433333334444444334333333	2.62x1.75 2 2.25x4.75 2 2.25x4.75 2 2.75x6.75 2 3.00x7.00 3 3.25x6.50 3 3.25x6.50 3 3.25x4.50 2 2.75x4.50 2 3.75x4.50 2 3.75x4.50 2 3.1.87x2.87 2 3.1.87x2.87 2 3.1.2x3.50 2 3.2.12x3.50 2 3.2.12x3.50 2 3.2.25x4.12 2 4.2.50x1.27 2 4.2.50x1.27 2 4.2.50x4.75 3 3.2.25x4.12 2 4.2.50x4.75 3 3.2.25x4.12 2 4.2.50x1.30 3 3.2.25x4.12 2 4.2.50x1.30 3 3.2.25x4.12 3 3.300x3.33 3 3.2.25x4.30 3 3.2.25x4.30 3 3.2.25x4.30 3 3.300x3.33 3 3.2.25x4.30 3 3.300x3.33 3 3.2.25x4.30 3 3.300x3.33 3 3.2.25x4.30 3 3.300x3.33 3 3.300x3.300x3.33 3 3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300x3.300	62x2.75 .25x4.00 .00x6.00 .00x	abce. Splash.	Gear Gear Gear Gear Gear Gear Gear Gear	Pump. Pump.	Vane. Cent.	NP. Stk. Stk. Stk. Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt	None Cent Cent Opt Cent	None. 1200 1100 1650 2000 1200 1200 1200 1000 None. None. None. 1200 1200 1200 1200 1200 1200 1200 120	1100 800 1000 1000 1000 1000 1000 1000	760 1650 2700 3750 4700 6700 750 750 1295 640 840 782 980 988 1140 946 954 951 1310 600 620 620 620 6375 6877 931 12122 274 234 240 260 260 260 260 260 260 260 260 260 26	No Yes Yes Yes Yes Yes Yes Yes Yes No	8584 826 30 32 21 2534 2634 2	193 156 143 156 152 152 152 153 156 156 156 156 156 156 156 156 156 156	370344944 389944 370344944 389944 469494 469494 3111694 3111694 3111694 3111694 3111694 3111694 3111694 3111694 3111694 3111694 311694	None None None None Opt Opt Opt 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	A. C. F. Special. WX Automatic. J. Automatic. Automatic. Automatic. Automatic. Special. WX Automatic. Automatic. Automatic. Automatic. Brennan Buda. WX Buda Ki Buda Ei Buda Fi Buda J. Buda Buda Buda Buda Buda J. Bu

Int_Integral.
L-Valves at side.
Mag-Magnesium.
Nict_Nickel Iron
NicS_Nickel Steel.
NP_No provision.
Opt-Optional.





AMERICAN STOCK

				Ins.)		9	CYLI	S	CRA	NKCA	SE		VAL	VES		END I	DRIVE			PISTO	NS		
MAKE AND MODEL	cylinders, Bore (Ins.)	(N.A.C.C.)	Maximum	(Cu.	Ratio	int Suspension		One Piece	Upper	Half	er Half)			r (Ins.)			Gear			(with Pins, Bushings) Ozs.	Piston F	ins	
MODEL	Designed For Number of Cyl and Stroke (In	Rated H.P. (N	R.P.M. at Mar Brake H.P.	Piston Displacement	Compression R	Number of Point	Head	No. Cast in Or	Integral with Cylinders?	Material	Material (Lower	Arrangement	Head Material	Clear Diameter	Lift (Ins.)	Туре	Non-Metallic Used On?	Material	Length (Ins.)	Weight (with F Rings & Bushir	Diameter and Length (Ins.)	Pin Bearing In	
reules OX T B, reules OXC reules OXC reules C T T, Tr reules E T, T, Tr reules G T B, reules G T B, reules TXA T, Tr recules WXAE recules WXB recules WXC recules WXC recules YXC recules TXA T, B, recules YXC T, B, recules YXC T, B, recules YXC T, B, recules YXC T, B, recules TXC T, Tr recules TXC T, Tr recules TXC T, Tr recules TXC T, Tr recules TXC T, Tr recules TXC T, B, recules TXC T, B, recules TXC T, B, recules TXC T, B, recules TXC T, B, recules TXC T, B recules TXC T, T recules TXC	\$\frac{\darkappa}{\darkappa} \frac{\darkappa}{\darkappa} \	40.00 44.00 44.40 43.3 457.0 28.9 43.3 37.7 43.5 28.9 60.0 612.5 625.60 28.9 32.40 40.0 48.40 45.7 66.5 4.40 40.3 33.7 445.7 66.5 4.40 40.3 33.7 445.7 66.5 4.40 67.6 65.4 40.3 33.7 40.3 33.4 40.3 33.8 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3	67-1400 101-2000 1150-2200 150-2200 150-2200 55-1800 90-1800 65-1800 90-1800 65-1800 120-2200 35- 41- 175-2200 38- 41- 175-2200 38- 74- 105- 55- 1800 103-10	471.0 471.0 471.0 471.0 665.2 468.0 312 468.0 312 468.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 471.0 312 312 312 312 312 3132 3132 3132 313	5 4 5 4 5 5 9 4 4 9 3 3 3 8 8 9 9 3 3 3 8 9 9 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	අප අප අප අප අප අප අප අප අප අප අප අප අප අ	Det. Det. Det. Det. Det.	111664666464444444444444444444444444444	Sep. Sep. Int. Int. Int. Int. Int. Int. Int. Int	Iron. Iron	Iron. Iron	L. L. L. L. L. L. L. L. L. L. L. L. L. L	Side.	2.50 1.38 1.38 1.38 1.38 1.38 1.38 1.38 1.38	384 31 33 33 33 33 33 33 33 33 33 33 33 33	Heli. Heli.	None. None.	CI. CI. CI. CI. CI. CI. CI. CI. CI. CI.	6.25	111.2.0 1175.5 64.0 1175.5 64.0 152.1 100.9 148.0 156.1 100.9 148.0 156.1 100.9 166.1 175.5 176.1 186.	87x2.81 87x2.52 1.00x3.06 1.12x3.32 1.00x3.15 75x3.63 75x2.82 1.50x4.00 1.62x4.20 1.62x4.60 1.62x4.60 1.62x4.60 1.62x4.60 1.62x4.60 1.62x4.60 1.62x4.60 1.62x4.60 1.62x5.00 1.62x5.00 1.62x5.00 1.62x5.00 1.62x5.00 1.62x5.00 1.62x5.00 1.62x5.00 1.62x5.00 1.50x5.10	Pist. Pist.	t.t.t.t.t.t.t.t.t.t.t.t.t.t.t.t.t.t.t.

ABBREVIATIONS:

a—Main Bearings.

Accar—Accessories Drive.

Al—Aluminum Alloy.

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d—Wrist Pins.
Det—Detachable.
Dur—Duralumin.

e — (Oiling System) — Timing Gear Case.
e — Exhaust.
Ecc — Eccentric.
f — Rocker Arm.
Flo — Floating.
Heli — Helical.
I — Both valves in head.

ENGINES—Continued





CONN	ODS	ING			С	RANKSHA	AFT			OILIN		CIRCULA		GO	VERNO	OR		MISC	ELLAN	NEOU	S			
						Crank Pin		Main Bearing	gs							2	A .	be.			erall l			MAKE
THE COLUMN	Center to Center Length (Ins.)	Weight (with Bushings and Cap) Ozs.	Material	Offset (Ins.)	Counter Balances Used?	Diameter and Length (Ins.)	Number	Diameter a		Pressure to	Pump Type	Туре	Pump Type	Furnished?	Туре	Maximum Governe Speed (R.P.M.)	need at which Maxi um Terque is De- leped (R.P.M.)	Weight (without Caretar or Ignition) L	Adapted for Use of K-rosene?	Width	Height	Length	Bell Housing Provided? S.A.E. Numbers	AND MODEL
ar. ar. ar. ar. ar. ar. ar. ar. ar. ar.	10.00 10.00 110.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 16.00	60	Car Car Car Car Car ChN ChN Car	. 62 . 56 None. No	No No	2.00x2.00 2.00x2.44 2.50x3.00 2.25x2.03 2.12x2.3 2.25x2.4 2.25x2.4 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x2.00 2.25x1.5 2.25x1.2 2.25x1.5 2.25x2.2	3 3 4 4 5 5 5 6 7 7 7 7 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7	2.00x2.62 2 0 2.25x3.44 2.2 2.50x3.90 2.6 2.75x2.28 2.75x2.28 2.7 2.75x2.28 2.75x2.28 2.75x2.31 2.3 2.75x2.31 2.3 2.75x2.31 2.3 3.25x1.44 3. 2.00x2.19 2.4 2.00x2.19 2.4 2.00x2.19 2.4 2.00x3.19 2.2 2.00x3.19 2.2 2.00x3.19 2.2 2.00x3.19 2.2 2.00x3.19 2.2 2.00x3.19 2.2 2.00x3.19 2.2 2.00x3.19 2.2 3.00x3.50 3.3 3.00x3.50 3.3 3.00x3.50 3.3 3.00x3.50 3.3 3.75x4.25 3.3 3	00x3 62 25x3 62 25x3 62 25x3 62 25x3 62 25x3 62 25x3 25x3 25x3 25x3 25x3 25x3 25x3 25x3 25x3	ab	Gear Gear Gear Gear Gear Gear Gear Gear	Opt. Pump. P	Cent. Cent.	Opt. Stk. Stk. NP. Stk. Stk. Stk. Stk. Stk. Stk. Stk. Stk	Cent. Cent.	1200 1000 1800 1800 2000 2000 0pt. 0pt. 0pt. 0pt. 1256 1256 1200 0pt. 0pt. 0pt. 0pt. 0pt. 0pt. 0pt. 0p	800 800 1000 1000 1100 1100 1100 1100 1100 1100 1100 10	470 1180 1300 1700 1230 1230 1230 1230 1230 1230 1230 1830 605 819 819 819 819 819 1650 1650 1700 1650 1700 1	Yes	26 24; 24; 24; 29; 28; 35; 36; 27; 173; 20; 22; 22; 22; 22; 22; 22; 22	24 14 14 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	30 h 1 423 4 423 4 552 4 553 4 552 6 56 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	3, 5 NoNoNoNoNoNoNoNo.	Erd. EWC. EWC. EWC. General Motors. Y & General Motors. Hall-Scott. Hall-Scott. Hall-Scott. Hall-Scott. Hall-Scott. Hall-Scott. Hall-Scott. Hall-Scott. Hall-Scott. Hall-Scott. Hall-Scott. Hercules. G. Hercules. G. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. Hercules. W) Hercules. W) Hercules. W) Hercules. W) Hercules. Hercul

lo—Valve in Head; overhead camshaft. Ind—Industrial Int—Integral. L—Valves at side. ("L" head). Mag—Magnesium. Nicl—Nickel Iron Nics—Nickel Steel. NP—No provision.

SpP—Splash with pressure. SS—Semi Steel. Stk—Standard Equipment. Suct—Suction. T—Trucks. ThS—Thermo-siphon Tr—Tractors.

Tun—Tungsten.
Van Bl'k—Van Blerck
Var—Various.
*—Optional.
*—Othere also.
†—Inlet valve only
1-1930 Specifications.



AMERICAN STOCK

					Ins.)		ion	CYLI		CRA	NKCA	SE		VALV	ES		FRO END D				PISTO	NS		
MAKE		ers, Bore	.C.)		nt (Cu.		Suspension		Piece	Upper	Half	Half)			(Ins.)						Ozs.	Piston P	ins	Jet.
AND MODEL	Designed For	Number of Cylinders, and Stroke (Ins.)	Rated H P. (N.A.C.C.)	R.P.M. at Maximum Brake H.P.	Piston Displacement	Compression Ratio	Number of Point	Head	No. Cast in One Pi	Integral with Cylinders?	Material	Material (Lower H	Arrangement	Head Material	Clear Diameter (Ir	Lift (Ins.)	Type	Non-Metallic Gear Used On?	Material	Length (Ins.)	Weight (with Pins, Rings & Bushings)	Diameter and Length (Ins.)	Pins Bearing	Number of Rings
Waukesha 6HB T Waukesha 6AB T Waukesha 6AB T Waukesha 6LS R Waukesha 6LS R Waukesha 6LK R Wisconsin SU T Wisconsin 7 T Wisconsin 7 T Wisconsin 6 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 7 T Wisconsin 6 T Wisconsin 6 T	& Tr. 4 & Tr. 4 & Tr. 4 & Tr. 4 & Tr. 4 & Tr. 4 & 4 & 4 & 4 & 4 & 4 & 4 & 4 & 4 & 4	-5x61/2 -51/2x61/2 -5x61/2 -5x61/2 -5x61/2 -5x61/2 -5x8 -63/2x8 -63/2x43/4 -33/2x43/4 -33/2x43/4 -43/43/4 -44/2x51/2 -41/2x53/4 -41/2x53/4 -5x53/4 -7x81/2	36.10 40.48.4 48.4 52.9 62.5 73.0 62.5 73.0 738.5 40.84 48.60 600 48.60 600 600 600 600 600 600 600 600 600	50-2000 75-3000 103-2200	268.0 477.0 212.0 309 377 267 318.1 1187 792 331 221	4.2 4.6 4.5	କ୍ୟ 4 4 4 4 ଫି ଫି ଫି ଫି ଫି ଫ ଫ ଫ ଫ ଫ ଫ ଫ ଫ ଫ ଫ ଫ ଫ	Det. Det. Det. Det. Det. Det. Det. Det.	244222666666662221146666664	Sep. Sep. Sep. Sep. Int. Int. Sep. Sep. Sep. Int. Int. Int. Int. Int. Int. Int. Int	Iron Iron	PS. Iron. Iron. Iron. Iron. Iron. PS. PS. PS. PS. PS. PS. Iron. Ir		Sil Sil Sil Sil-e. Sil Sil	1.53 1.50 1.93 1.60 1.62 1.62 1.81 1.50 1.81 1.50 1.81 1.50	38	Heli Heli	None None None None None None None None None None None None None None None Cam	CI CI CI CI CI CI Al CI CI CI CI CI CI Al CI	4.25 4.00 4.75 3.75 4.00 4.16 4.72 6.22 3.99 4.4	54.7 32.0 5.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6	1.38x3.13 .38x3.25 .38x3.38 .62x .62x 1.00x2.25 1.38x2.93 2.25x3.75 2.25x4.25 1.06x3.50 1.19x3.93 .93x3.72 1.63x3.90 1.19x3.47 1.63x3.90 1.19x3.94 1.69x5.22 1.63x3.09	Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Pist. Rod. Rod. Rod. Rod. Rod. Rod. Rod. Rod	

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C&H—Chain and Helical Gear.
Cl—Cast Iron.
Crac—Crankshaft and Accessories.
Cran—Crankshaft.
d—Wrist Pins.
Det—Detachable.

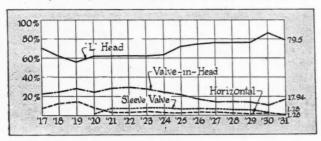
Dur—Duralumin.

—(Oiling System)—Timing Gear Case.

—Exhaust.
Ecc—Eccentric.
f—Rocker Arm.
Flo—Floating.
Heli—Helical.

Valve Location

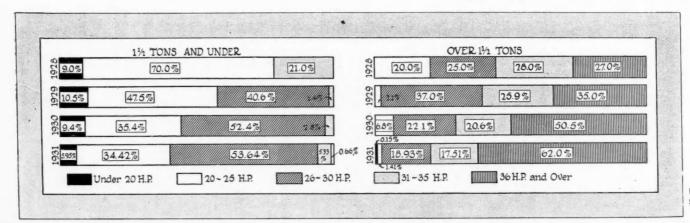
(Passenger Car Engines in Current Chassis)



For Data See p. 326

Automotive !

Rated Horsepower (Truck Engines in Current Chassis)



For Date See p. 34

ENGINES—Continued



CON	ROD	TING	G			CR	ANKSHAF	FT			OILI		WAT		GC	VERN	OR		MISC	CELLA	NEOU	S			
rial		vith	ings and Cap) Ozs.	rial	et (Ins.)	iter Balances	Crank Pin ('sul) qt	ber	Length	ter and	ure to	p Type		p Type	Furnished?		30	d at which Maxi- Torque is De- ed (R.P.M.)	ht (without Carbu- or Ignition) Lbs.	pted for Use erosene?	mens		Ins.)	Housing ded? Numbers	MAKE AND MODEL
Mate	Center	Weight	ings	Material	Offset	Counter Used?	Diamete	Number	Frent	Rear	Pres	Pump	Туре	Pump	Furn	Туре	Maxim	Speed mum velope	Weight retor or	Adapted of Kero	Width	Height	Length	Bell Ho Provide S.A.E.	
Car. Car. Car. Car. Car. Car. Car. Car.	. 18. 8. 8. 8. 8. 8. 10. 10. 12. 13. 13. 18. 10. 12. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	25 25	99.0	Car Car Car Car Car Car Car Car Car ChN ChN ChN Car	None None None None	No No	2.50x1.78 2.00x2.00 3.00x2 78	3335555447777774444777334444334343433	3. 00:23. 00 3. 75:33.	2. 50×4. 0003. 3. 00×3. 63 3. 00×3. 63 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 75×5. 50 3. 50×3. 30×3. 30×3. 30×3. 30×3. 30 3. 50×3. 30×3.	abce abce abce abce abce abce abce abce	Gear. Gear.	Pump. Pump.	Cent. Cent.	Stk. Stk. Stk. Stk. Stk. Stk. Opt. Opt. Opt. Opt. Opt. Opt. Opt. Stk. Stk. Opt. NP. Opt. NP.	Cent Cent	1800 None. None. None. 1571 1800	0 750 0 1000 900 800 2500 0 900 0 1000 700 800 800 0 950	860 875 890 1150 1250 1300 7305 7300 7335 615 790 950 800 1015 640 850 2050 1505 1806	No No Yes Yes No No No No No No No No	34 34 253,4 203,2 203,2 203,2 203,2 204,2 215,2 26 26 26 225,4 217,6 26 26 26 26 27,2 28,2 28,2 28,2 28,2 28,2 28,2 28,2	401/2 422 421/3/4/4 51/3/4/4 51/3/4/4 3331/4 41/4 41/4 41/4 41/4 41/4	47% 48 48 59 59 44 40 43 43 43 46 46 46 46 46 46 46 46 46 46 46 46 46	1, 2 1 1 0, 00 0, 00 4 4 3, 2 3, 2 2 2 2 2 00 00 00 3 3 3 2 2 2 2 2 3 3 2 2 2 2	Waukesha DKI Waukesha HI Waukesha HI Waukesha WI Waukesha WI Waukesha WI Waukesha GTI Waukesha GTI Waukesha GTI Waukesha GMI Waukesha GMI Waukesha GMI Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GSR Waukesha GAI Waukesha GR Waukesha GL Waukesha GL Wisconsin SI Wisconsin HI Wisconsin HI Wisconsin HI Wisconsin HI Wisconsin HI Wisconsin GI Wisconsin GI Wisconsin GI Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GG Wisconsin GB-2, B

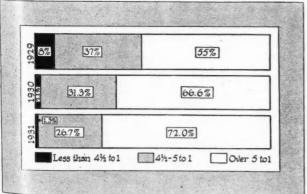
I—Both valves in head.
Io—Valve in Head; overhead camshaft.
Ind—Industrial.
Int—Integral.
L.—Valves at side. ("L" head).
Mag—Magnesium.
Nicl—Nickel Iron.

NickS—Nickel Steel.
NP—No provision.
Opt.—Optional.
PS—Pressed Steel.
Pist—Piston.
Rail C—Rail Cars.
Sep—Separate.
Sil—Silcrome Steel.

Tr—Tractors.
Tun—Tungsten.
Van Bl'k—Van Blerek.
Var—Various.
°—Optional.
°—Others also. Inlet valve only.

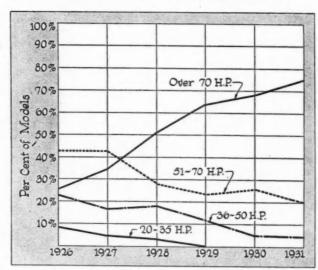
rengine Trends

Compression Ratios (Passenger Car Engines in Current Chassis)



Maximum Horsepower (Passenger Car Engines in Current Chassis)

For Data See p. 326



For Data See p. 326

or Dat

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AMERICAN STOCK

					¥.	GE		ATERI E. Nos.			GE.	AR RA	TIO		NOM! PITCH GEA	1 OF	FAC OI GEA	F	AXLI SHAF		RANG SPR CENT	ING			2
MAKE		Spring	Shaft			First	Re-	Fin Reduc		1	First Reduction	n	Fina Reduc						_				by		Radius Rods?
AND MODEL	Designed for	Maximum Load on Pads (Lbs.)	Maximum Drive S Torque (Lb. Ft.)	Type	Final Drive	Pinion	Gear	Pinien	Gear	Standard	Optional	Optional	Standard	Optional	First Reduction	Final Reduction	First Reduction	Final Reduction	Diameter at Dif- ferential End (Ins. Diameter at Whee End (Ins.)	Material S.A.E. No	Maximum	Minimum	Propulsion Taken	Torque Taken by	Provision for Radio
Clark. B36 Clark. B51 Clark. B51 Clark. B72 Clark. B-37 Clark. B-37 Clark. B-37 Clark. B-37 Clark. B-37 Clark. B-61 Clark. B-61 Clark. B-61 Clark. B-61 Clark. B-61 Clark. B-61 Clark. B-61 Clark. B-61 Clark. B-62 Columbia 1750 Columbia 17600 Columbia 2200 Columbia 3600 Columbia 3600 Columbia 3600 Columbia 5450 Columbia 1500 Columbia 1500 Columbia 160 Columbia 160 Columbia 160 Columbia 160 Columbia 160 Columbia 160 Caten. 116 Caten. 116 Caten. 101 Caten. 102 C	A Cars . A Cars . O Cars . O Tarcks . Trucks .	15000 15000 18000 22000 18000 85i 1700 2300 2300 190 200 4000 †† †† †† ††	330 330 330 460 675 900 675 1355 1130 1130 1130 1130 1130 1130 113	THE REPORT OF THE PROPERTY OF	SB. SB. SB. SB. SB. SB. SB. SB. SB. SB.	2320 2512 2320 2315 2315 2315 2312 2512 2320 2320 2320 2320 2320 2320 2512 2513 2512	2315 2320 2315 2315 2315 2315 2315 2315 2315 2315	2512 2512 2512 2512 2512 2512 2512 2512	2315 2315 2315 2315 2315 2315 2315 2315	2 39 1 90 2 2 46 2 2 82 2 2 2 82 2 2 2 82 2 2 2 82 2 2 2 82 2 2 2 2	5.37 6.12 6.37 5.33 6.42 7.14 7.16 2.56 1.92 1.93 2.80 2.80 2.80 Var. Var. Var. Var. Var. Var. Var. 0.6 3.486 3.486 3.486 3.55 5.57 6.49 6.75 6.80		15.46 12.13 8.05 8.05 7.5 7.5 4.08 10.48 7.02 9.32 8.4 10.45 8.15 9.92 5.9 6.66 7.8 7.8 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	9,43 7,10 6,09 8,85 5,66 8,4 9,94 7,85 5,66 7,2 7,2 7,2 7,2 7,2 7,2 7,8 7,8 7,8 7,8 7,8 7,8 7,8 7,8 7,8 7,8	4.25 3.80 3.80 3.34 4.3 3.34 4.13 4.13 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 3.36 4.25 4.25 4.25 4.25 4.25 4.25 4.25 4.25	4.00 4-6 4-6 4-5 4-5 3.4 ₅ 3.4 ₅ 4-5 13.5:13.5:13.5:13.5:13.5:13.5:13.5:13.5:	1.68 1.75 1.75 1.2 1.31 1.46 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	3.25 3.25 3.00 3.50 3.50 3.45 4.00 2.25 2.25 2.50 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3	1.63 1.97 1.75 2.06 2.88 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1.75 1.77 1	31402 3140	40 40 40 40 40 40 40 40	381/2 3 381/2 3 381/2 3 381/2 3 381/2 3 381/2 3 381/2 3 381/2 3 381/2 3 381/2 3 381/2 3 381/2 3 371/2 3 381/2 3 3 381/2 3 3 381/2 3 3 381/2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	p.p.p.p.p.p.p.p.p.p.p.p.p.p.p.p.p.p.p.	Sp. Sp. Sp. Sp. Sp. Sp. Sp. Sp. Sp. Sp.	NO Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes NO

ABBREVIATIONS:

°—Others Also §—Axle Shaft Torque A A—Above Axle B—Bevel B A—Below Axle
B-L—Brown-Lipe
B-L-C—Brown-Lipe-Chapin
B-R—Ball and Roller

Bro—Bronze
Bu—Buses
C—Cars
CS—Cast Steel

D R—Double Reduction
Ext Ds—External Driveshaft
Ext Rw—External Rear Wheels
Fair—Fairfield

F F—Full Floating
½ F—Semi-Floating
¾ F—Three-quarter Floating
H B—Helical Bevel

American

*—Capacity at the ground B—Beval B—Beval B—Boller CS—Cast Steel Fair—Fairfield H B
††—"Recommendations of axle sizes are made by the Timken-Detroit Axle Co. only after complete vehicle specifications have been submitted by the vehicle manufacturer."

Final Drive Types

Chassis 11/2 Tons and Less Chassis 11/2 Tons and Over

Bevel	Worm	Internal	Double Red.	Chain	Bevel	Worm	Internal	Double Red.	Chain	
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REAR AXLES





	DIFFERE	NTIAL	SERVI	CE BRAKE	EMERGE	NCY I	BRAKE			BE	ARING	is						
Drive? Location of Spring Pads	Make	Type Number of Pinions	Type and Location	Dismeter of Drum (Ins.) Width (Ins.) Thickness of Ins.)	Type and Lecation	Diameter of Drum (Ins.)	Width (Ins.) Thickness uir.	Location of Brake Shaft Arms	First Reduction Pinion	Final Reduction Pinion	At Differential	At Wheels	On Pinion Shaft	Azle Housing Material (S.A.E. No.)	Minimum Road Clearance With Regular Tire Size (Ins.)	Tread (Ins.)	Weight (Lbs.) Recommended Lubricant	MAKE AND MODEL
8. B A 8. Opt. 8. Opt. 9. Op	Timken Timken Timken Timken Timken Timken Timken Timken Timken Own Own Own Own Own Own Own Own Own Ow	B. 44 B. 22 B. 22 B. 22 B. 22 B. 24 B. 22 B. 34 B. 32 B. 34 B. 32 B. 34 B. 32 B. 34 B. 32 B. 34 B. 32 B. 34 B. 32 B. 34 B. 32 B. 34 B. 32 B. 34 B. 32 B. 34 B. 32 B. 34	Int-Rw Int-Rw	15	None. None. None. None. None. None. None. None. None. None. None. None. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Ps. Int-Rw. None.	No No	NO NO	IF. IF. IF. IF. IF. IF. IF. IF. IF. IF.	Roller Ball. Ball. Ball. Ball. Ball. Ball. Ball. Ball. Ball. Ball.	None None None None None None None Roller Ball Ball Ball Ball Ball Roller	Roller. Roller	Roller. I Roller. Roller. I Roller. Roller. sall § 3 sall § 3 sall § 5 sall § 6 sall	Ma I Ma I	9-30 914-32 974-32 974-32 974-32 974-32 974-32 974-32 974-32 974-32 974-32 974-32 105-33 974-32 105-33 974-32 105-34 105-34 11-36 11-36 11-36 11-36 11-36 11-36 11-36 11-36 11-36 11-36	577 603 6 613 6 63 6 63 6 63 6 63 6 63 6 63	242 Oil 2450 Oil 360 Oil 360 Oil 360 Oil 376 Oil 376 Oil 442 Oil 459 Oil 459 Oil 459 Oil 559 Oil 559 Oil 550 Oil 560 Oil 570 Oil 580 Oil 580 Oil 580 Oil 585 Oil 585 Oil 585 Oil 585 Oil 585 Oil 585 Oil 585 Oil 586 Oil 587 Oil 587 Oil 588 Oil 589 Oil	Timken. 522 Timken. 532 Timken. 542 Timken. 562 Timken. 562 Timken. 645 Timken. 652 Timken. 655 Timken. 667 Timken. 667 Timken. 667 Timken. 755 Timken. 755 Timken. 755 Timken. 755 Timken. 766 Timken. 767 Wisconsin. 462(Wisconsin. 462(Wisconsin. 678 Wisconsin. 681 Wisconsin. 881 Wisconsin. 12527 Wisconsin. 12527 Wisconsin. 15678 Wisconsin. 15678	

lyd—Hydraulie Brakes lf—Inside of Frame lf—Internal Gear

n

%

ries

Int Ds—Internal Driveshaft
Ma I—Malleable Iron
Mol—Molybdenum

Truck Trends an

Clutch Types

 Chassis I/2 Tons and Less

 Year
 Multiple Disk
 Sing

 1931
 \$1.4
 68

 1930
 59.5
 46

 1929
 64.5
 33

 1923
 72.0%
 28

Single Plate 68.6 40.5 35.5 28.0%

Single Plate 1931 1930 1929 1928 29.4 19.5 16 12.5%



AMERICAN STOCK GEARSETS



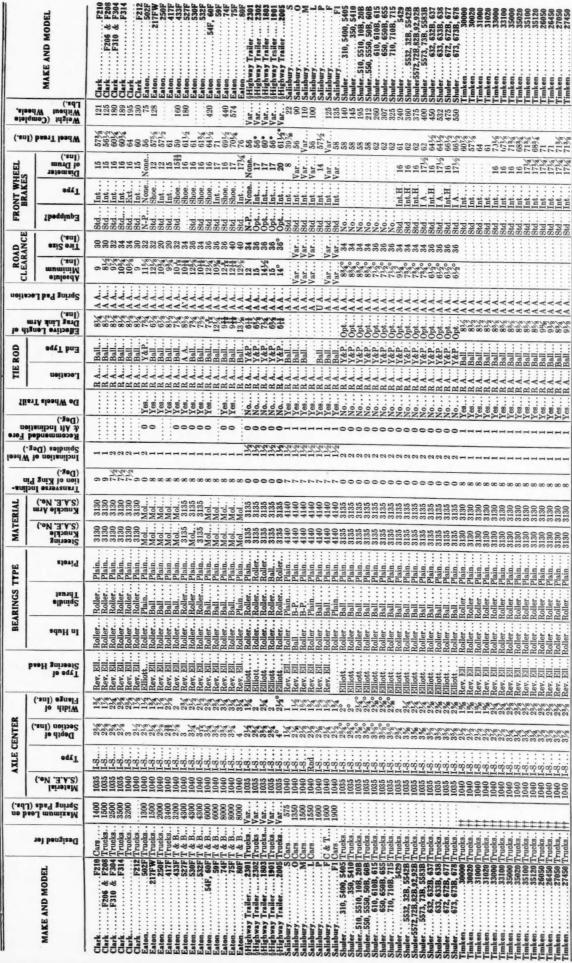
		α υ . Τ
		ABBREVIATIONS: *—Auxiliary Transmission **—Expecial Design **—Optional **—Optional **—Optional **—Optional **—Optional **—Optional **—Optional **—Optional **—Optional **—Amid-Amidships **—Ball and Roller Cart I—Cast Iron **—Cart I—Cast Iron **—Cart I—Cast Iron **—Cart I—Cast Iron **—Cart I—Cast Iron **—Che—Cast Iron **—Che—Cast Iron **—Che—Cast Iron **—Che—Cast Iron **—Optional **—Optional **—Optional **—Optional **—Optional **—Optional **—Optional **—Optional **—Expecial **—Expecial **—Expecial **—Expecial **—Separate Unit **—Separate Unit ** **—Separate Unit ** **—Separate Unit ** **—Separate Unit ** **——Separate Unit ** ** **——Separate Unit ** ** **——Separate Unit ** ** ** **——Separate Unit ** ** ** ** ** ** ** ** ** ** ** ** **
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		ABBREVIATIONS **-Auxiliary Train insision "—Special Design "—Semi Steel "—Optional "—Others also "—Others also "—Others also "—Liso Specificat Alumi—Auminum Alumi—Auminum Alumi—Auminum Ba-Buses Ba-Buses Ba-Buses Ba-Buses Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart I—Cast Iron Cart III Car
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GE/	Second	20000000000000000000000000000000000000
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				ABBREVIATIONS:Others Also t-1030 Specifications	22 Al-Varies 28 AW—Above Wheel 31 Beb-Buses 32 Ber—Bronae 28 Ber—Bronae 30 Burn—Bunting 30 Burn—Bunting 31 Car—Carbon Steel 32 Car—Carbon Steel 33 Car—Carbon Steel 34 Car—Carbon Steel 35 Car—Carbon Steel 36 Car—Carbon Steel 37 Car—Carbon Steel 38 Car—Carbon Steel 39 Car—Carbon Steel 30 Car—Carbon Steel 31 Car—Carbon Steel 32 Car—Carbon Steel 33 Nat.—Naleable 34 Nat.—Naleable 35 Nat.—Naleable 36 Ous—Quadrant 37 Nat.—Steel 38 RL—Ratchet Levers 38 Nat.—Nat.—Steel 39 Nat.—Steel 39 Nat.—Steel 39 Nat.—Steel 30 Cas—Capecial Steel 30 Cas—Quadrant 31 Car—Carbon 32 Cas—Steel 33 Nat.—Nat. 34 Cas—Special Steel 35 Sas—Special Steel 36 Cas—Special Steel 37 Cas—Special Steel 38 Cas—Special Steel 38 Cas—Warn and Shaft 38 W&W—Worm and Shaft 38 W&W—Worm and Shaft 38 W&W—Worm and Shaft 38 W&W—Worm and Shaft 38 AR—N
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AMERICAN STOCK FRONT AXLES





Tub—Tubular UA—Under Axle Var—Varies Y&P—Yoke and Pin

Std—Standard E T—Trucks Te—Tractor

Opt—Optional
R A—Rear of Axle
Rev. Ell.—Reverse Elliott
Rnd—Round

IA—Internal Air Operated
I-M—Internal Mechanical
Int—Internal

E-H-External Hydraulic Ext-External H-Hydraulic

B-R—Ball or Plain B-R—Ball or Roller. C—Cars

AA—Above Arle ASt—Alloy Steel B—Buses

*—Dimensions Optional

-Also Others

"Recommendation of axle sizes are made by the Timken-Detroit Axle Co. only after complete vehicle specifications have been submitted by the vehicle manufacturers" = 1920 Specifications



AMERICAN STOCK CLUTCHES



		Capacity,				DIAME OF FAC		Members	spers	erial	1_	PRE	ESSUR	ES (Lb	s.)	(Ins.)	_		RIVE EN BY	ant	ovided	3	
MAKE AND MODEL	Designed Far	Rated Torque Cap (Lbs. ft.)	Туре	Facing Material	Mean Radius of E Friction Face (Ins.	Maximum (Ins.)	Minimum (Ins.)	No. of Driving Men	No. of Driven Men	Disk or Plate Materia	Ne. of Springs	Total Spring Pressure	Total Pressure on Friction Face	Pressure per Sq. Ins. of Friction Surface	Pressure Required at Thrust Bearing to Disengage	Overall Outside Leter of Clutch (In	Type of Throwen	From Flywheel to Driving Members of Clutch	Fr'm Driv'g Memb' of Clutch to Driving Shaft of Clutch	Means of Adjuster	Is Clutch Brake Provided	Bell Heusing (S.A.E.) (Nes.)	Weight (Lbs.)
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ABBREVIATIONS: 1—1930 Specifications Others also "Varies According to Load Al St—Alloy Steel Ann B—Annular Ball Ball T—Ball Thrust

B—Buses
Br & St—Bronze and Steel
C—Cars
Cast l—Cast Iron
Cl&S—Cast Iron and Steel
Cov. B—Cover Bolts
DP—Double Plate

Gear T—Gear Teeth
L&P—Lugs and Pins
Lea—Leather
L.O.P,—Lugs on Pressure Plate
MD—Multiple Dry Disc
MO—Multiple Disk in Oil
Me—Molded Composition

Sp B—Spring Bolts
T—Trucks
Tr—Tractors
Th R—Threaded Ring
Var—Varies
W-M—Woven Fabric and Molded
We—Woven Fabric



AIRPLANES OF THE

							GEN	ERAL								E	NG	INE			
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MAKE AND MODEL	ATC Number or Other Gov't Approval	Type	Specially Designed or Equipped for	Price \$	Capacity	Cu. Ft. Capacity of Cargo Com- partment	Length (Ft. Ins.)	Height (Ft. Ins.)	Width (Ft. Ins.)	Wings (Folding, Demountable, Rigid)	Area Main Wings (Sq. Ft.)	Empty (Lbs.)	Full Load	Actual Pay	Pay Load Per Engine Hp. (Lbs.)	Engine Make, Model and Number Fitted	Cooling & Type	Total Hp.	Engine R.P.M.	Propeller R.P.M.	Method of Starti and Starter Mal
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ABBREVIATIONS:
General

Others used
Apl—Applied for
AT—Approved Type
C-A—Ce.tificate of Approval
Y—Yes
N—No
Var—Varies
Opt or O—Optional
Designed for Designed for AA—Aerial Advertising

Bo—Bombing
C-T—Civilian Training
Fr—Freight
Ma—Mail
Mi—Military Pursuit
M-T—Military Training
Ob—Observation
Pa—Passenger
Pa—Photography
Sp—Sport
Tr—Transport

A—Amphibion
B—Biplane
C—Cabin
F—Flying boat
L—Land plane
M—Monoplane
O—Open
S—Seaplane

Engine Make P & W-Pratt & Whitney

Engine Type
A-H—Air cooled horizontally opposed cyls.
A-L—Air cooled in line
A-R—Air cooled radial
L-L—Liquid cooled in line
L-Y—Liquid cooled Vee type
L-W—Liquid cooled W type

Starter Make Ecl—Eclipse Hey—Heywood

Method of Starting
CA—Compressed Air
EM—Electric Motor.
G—Gas Starter
HC—Hand Crank
HM—Hand Magneto
In—Inertia
PS—Propeller Swinging
Propeller Material
A—Aluminum
C—Composition
Du—Dural

S—Steel W—Wood W-C—Wood & Composition

Battery Make Battery Make
D-C—Dry Cells
Ed—Edison
Eve—Eveready
Exi—Exide
Lab—Labinal
RV—Ray Vac
Sle—Slem

THE WORLD



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Wil-Willard

Wil-Willard
Propeller Make
Am-P—American Propeller Co.
As—Airscrew Co.
C.R.—Curtiss Reed
Fl.—Flottorp
F-R.—Fairey-Reed
Gar.—Gardner
Ha —Hamilton Standard
Har.—Hartzell

Hei—Heine
Lev—Levassore
Mer—Merville
Par—Paragon
Rat—Ratier
Sch—Schwarz
Ste—Storey
Sup—Supreme
Wat—Watte

Brakes Make A-P-Aircraft Products Ben—Bendix
Dha—Dhainant
Dun-B—Dunlop-Bendix
Fas—Fast
Ge—Goodyear
Mar—Marelli
Mes—Messier
Pal—Palmer
Sau—Sauzedde

Wheels Make AmW—American Wire Wheel

A-P—Aircraft Products
Bud—Budd
Dun—Dunlop
Elek—Elektron
Fas—Fast
Ge—Goodyear Air Wheels
Han—Hanriot
Joh—Johnson
K-H—Kelsey Hays
Mes—Messier
Pal—Palmer
P-D—Palmer, Dunlop

Structure and Covering Materials

Materials
Al—Aluminum
Ale—Alelad
Du—Dural
Du-C—Dural Channel
Du-T—Dural Tube
F—Fabric
L-W—Laminated Wood

S—Steel Tube
SA—Sheet Aluminum

Wings Type
D—Demountable
F—Folding
R—Rigid Cabin Heater
Lab—Labinal
Lam—Lambert



AIRPLANES OF THE

							GENE	ERAL								1	NG	INE			
PLANE,			-				Overa	ll Dimens	ions	(þig		1	Weigh	its		r					g e
MAKE AND MODEL	ATC Number or Other Gov't Approval	Type	Specially Designed or Equipped for	Price \$	Total Seating Capacity	Cu. Ft. Capacity of Cargo Com- partment	Length (Ft. Ins.)	Height (Ft. Ins.)	Width (Ft. Ins.)	Wings (Folding, Demountable, Rigid)	Area Main Wings (Sq. Ft.)	Empty (Lbs.)	Full Load (Lbs.)	Actual Pay Load (Lbs.)	Pay Load Per Engine Hp. (Lbs.)	Engine Make, Model and Number Fitted	Caoling & Type	Total Hp.	Engine R.P.M.	Propeller R.P.M.	Method of Starting and Starter Make
							I	AMER			Cont.					*					
airchild 71-A airchild 71-A airchild 171-A airchild KR-34-C* airchild KR-34-C* airchild KR-34-B airchild KR-21-B okker AF-32 okker AF-10A okker AF-XI-A okker Super-Univ. okker Std-Univ. ord 4-AT-E ord 5-AT-C-C ord 5-AT-C-C	96 234 222 52 164 132	CLM CAM. CLM CLM CLM	C-T. C-T. Tr. Tr. Ma, Tr. Tr. Tr. Tr. Tr. Fr,Tr,Ma	18900 18900 12900 6575 6576 4375 4525 110000 54500 22500 33775 17500 11000 40000 62000	14 9 7 8 7 13 15	13.0 13.0 39.6 5.76 5.76 3.0 120.0 62.0 30.0 30.0 30.0 30.0 30.0 30.0	32-1014 32-1034 30-10 23-0 22-936 20-10 70-2 50-7 43-4 45-10 36-11 33-6 49-10 50-3 51-4	9-4 10-0 9-2 9-3 9-10 9 8-11 16-2 12-9 12-4 14-5 9-1 8-6 11-9 12-0 14-6	50-0 50-0 45-6 30-0 30-0 27-3/8 99-0 79-3 59-0 50-8 47-9 74-0 77-10	F F R R R R R R	321.0 290.0 290.0 285.0 192.56 1330.0 854.0 550.0 387.0 341.0 785.0 835.0 835.0	2940 3156 2676 1524 1498 1100 1120 14910 7780 4245 5065 3250 2482 6500 7600 9100	5500 4246 2368 2344	1206 710 380 380	2.68 2.36 2.30 2.30	1-P&W Wasp 1-Wright R-972 1-Wright R-972 1-Wright R-544 1-Comet 7-L 1-Kinner B-4 4-P&W Hornet 'B' 3-P&W Wasp 'C' 1-P&W.Hornet' A''' 1-P&W.Hornet' A''' 1-P&W.Hornet' A''' 1-P&W.Hornet' A''' 1-P&W.Hornet' A''' 1-P&W.Hornet' A''' 3-P&W.Hornet' A''' 3-P&W.Wasp 'C' 1-Wright. J-3-3-Wright. J-3-8-8-W.Wasp (3-P&W.Wasp (3-P&W	A-R A-R A-R	450 300 165 165	2000 2000 1900 1900 1810 1950 2000 1900 2000 2000 2000 2000	2000 2000 1900 1810 1950 2000 1900 2000 2000 2000 2000	In In In In In In In In In In In In In I
reat Lakes2T-1A	228		C-T	3150	2		20-4	7-11	26-8	R	187.6	1002	1580	237		1-Am. Cirrus Mk.II		90			PS
leath		CAB. CAB. OAM. OLB.	C-T Tr Tr C-T Sp Sp Sp	975 15500 18500 5800 950 1075 1975	4 5 2 1 1	60.0 60.0 None 1.0 2.0	28-0 15-0 15-6	6-0 12-2½ 12-2½ 8-4 5-9 5-9 6-9	2-0 40-0 40-0 38-0 20-0 20-0 27-0	D D D D D	376 376 198 103 105 180	285 2960 3240 1350 260 265 400	4400 4900 1950 450 500	680 900 200 0 75		1-Heath	9 A-R. 9 A-R.	300 420 110 20	0 2000 0 2100 0 1850 0 1850 0 1850	2000 2000 2100 1850 1850 1850 1900	Ecl. Ecl. Hey. PS.
Seystone Commuter K-8: Seystone Airyacht K-8: Seystone Airyacht CZ-Coystone Airyacht CZ-Loystone Patrician K'81: Sittyhawk. B-Sittyhawk. B-Sittyhawk. B-Sittyhawk.	219 Type 2. 90 91 240 134	CAB.			4 9 8 8 20 3		32-41/4 37-11/8 34-81/2 34-81/2 63-0 22-6 22-11	14-0 15-9 13-0 13-0 13-4 8-8 8-8	40-0 46-63/4 46-8 46-8 86-5 28-0 28-0	D D D D R	437 508 517 517 930 233 233	2927 4071 3950 3950 10000 1139 1107	4150 6250 5900 5900 16600 1899	0		1-Wright J- 1-Wright Cyclor 1-Wright Cyclor 1-P&W Horne 1-Wright Cyclor 1-Siemans SH-1 1-Kinner K	6 A-R. ie A-R. ie A-R. ie A-R. 4 A-R.	300 524 524 524 10	0 200 5 190 5 190 5 190 5 190 5 171	0 2000 0 1900 0 1900 0 1900 0 1710 0 1810	Ecl. Ecl. Ecl. Ecl. Ecl. HM
aird. LCB-20 aird. LCB-30 aird. LCR-20 aird. LCR-20 aird. LCR-30 aird. LCR-W-45 aird. LC-RW-45 enert. LC-RW-30 incoln. PT incoln. PTV incoln. PTV incoln. PTV	353 152 176 0 Apl 0 377 191 279 284	OLB. OLB. OLB. OLB.	C-T,M-T	9850 10850 10500 11500 21000 14250 4950 3860 4310 3360	3 3 3 3 2 2 2 2 2	40.0 38.0 38.0 38.0	23-9 22-9 22-9 22-8	9-3 9-3 9-3 9-0 9-6 9-0 9-10 8-10 9-3 9-3	34-0 34-0 28-0 28-0 30-6 28-0 25-0 32-3 32-3 32-3 32-3	R.	295 295 202 202 216 202 296 297 297 297 277	1800 1930 1848 1922 2120 1922 1400 1428 1176 1203	302 291 301 320 301 255 196 176 179	4 39 0 39 0 22 0 39	0 1.77 0 1.3 0 .518 0 1.3	1-Wright Whirl J. 1-Wright. J. 1-Wright. J. 1-Wright. J. 1-P&W. Was 1-P&W. Was 1-Continental. A. 1-Curtiss. OX 1-Kinner. 1-Warner. 1-Brownback. Tig	5 A-R 6 A-R 10 A-R 10 A-R	22 30 42 30	0 0 5 0 5 195 0 145 0 181 0 195	0 1950 0 1810 0 1950 0 1700	In. In. In. Hey
Martin. PM- Martin. PM- Martin. P3M- Martin. XT5M- Mercury. Chi MohawkN.PintoM-I-CV MohawkN.PintoM-I-CV	1 1 235 263		Pa	3598	5 7 2 2 2 2	2	49-4 49-0 61-5 28-7 23-0 24-2½ 24-2½	16-4 16-9 12-4 8-7 7-7 7-7	72-10 72-10 100-0 41-0 35-8 34-11 34-11	D D D D D	1162 1189 1115 417 192 145 145	9101	57 180	5 8 8 20 0 25	012.8	2-Wright Cyclor 2-Wright Cyclor 2-P&W Wai 1-P&W Horn 2 1-LeBlond S 1-Kinner K	ne A-R sp A-R et A-R 90 A-R -5 A-R	115 85 52	0 195 0 195 5 195 0 205 0 181	0 156 0 97 0 156 0 156 0 181 0 185	5 In. 0 In. 0 In. PS. 0 In.
New Standard D-25, New Standard D-26, New Standard D-27, New Standard D-29, New Standard D-29, New Standard NT-	225 A 226 S 324 A 216	OLB. OLB. OLB.	Tr. Ma Ma C-T C-T	9850 9750 9750 5000 4188	5 3 1 1 2		26-10 26-10 26-10 24-5 24-5 24-5	10-2 10-2 10-2 9-2 9-2 9-2 9-2	35-0 35-0 35-0 30-0 30-0 30-0	D D D D	350 350 350 245 245 245	2058 2058 2058 1198 1168 1211	340 185 179	0 76 0 76 0 23 0 30	0 3.2 5 3.2 5 3.2 4 3.0 0 3.0 0 2.0	1-Kinner	-6 A-R -6 A-R A-R . A-R	22	25 200 25 200 00 181 00 181	0 200 0 200 0 200 0 181 0 181 0 181	0 HC 0 HC 0 HC
Nicholas-Beazley NB-4 Nicholas-Beazley NB-4V	E. M. 2-264	120120	C-T	3900	3	14.75	23-7	6-11 6-11	32-8 32-8	R.,	159.5 159.5	828	154	35	03.9	1-WarnerJ-	R A-R	8	202	5 237 25 202	5 PS.
Nicholas-Beazley NB-40 Paramount Cabinaire 16 Paramount Cabinaire 17 Paramount Cabinaire 11 Pitcairn. PA-77 Pitcairn. PA-77 Pitcairn. PA-77	5 265 0 2-233 0 2-165 196 5 196	CLB. CLB. CLB. OLB.	Ma, Fr.	. 800	0 4 0 4 0 4 0 1 0 3	42.0	24-7 24-7 24-7 23-9 23-9	6-11 9- 9- 9- 9-61 9-61 9-9		D D D R R	309 309 309 243.3 243.3 278	162 162 162 143 189 182 227	263 263 5 225	30 51 30 51	03.9	1-Wright	70 A-F	l 16	65 200 65 200 10 183 45 200 45 200	00 220 00 200 00 200 50 185 00 200 00 200 00 200	0 PS. 0 PS. 0 PS. 0 Ecl
Shamrock3-4C-16 Shamrock3-4W-16 Shamrock3-5W-24	Pending Pending Pending Pending Pending Pending Pending	CLM CLM CLM CLM CLM CLM	Ma,Fr,T Ma,Fr,T Ma,Fr,T Ma,Fr,T Ma,Fr,T	600 625 7	0 4		28-8 28-8 28-8 28-8 28-8 28-8	8-8 8-8 8-8 8-8 8-8 8-8	42-6 42-6 42-6 42-6 42-6 42-6 42-6	R R R R R	242 242 242 242 242 242 242	160 - 160 - 169 175 175 193 193	0 27 0 27 0 30 4 31	70 66 70 66 60 86	00 3.6 00 3.6 00 3.8	1-Continental. AA 1-WrightR-5 1-WrightR-7	D A-H 40 A-H 60 A-H	R 10 R 10 R 20	65 20 65 20 40 20 00 20 00 20 00 20	00 200 00 200 00 200 00 200 00 200 00 200 00 200	00 Ecl 00 Ecl 00 Ecl 00 Ecl 00 Ecl 00 Ecl

General

Others used
Apl—Applied for
AT—Approved Type
C-A—Certificate of Approval
Y—Yes
N—No
Var—Varies
Opt or O—Optional
Designed for Designed for AA—Aerial Advertising

Bo—Bombing
C-T—Civilian Training
Fr—Freight
Ma—Mail
Mi—Military Pursuit
M-T—Mi itary Training
Ob—Observation
Pa—Passenger
Po—Photography
Sp—Sport
Tr—Transport

Type of Plane
A—Amphibion
B—Biplane
C—Cabin
F—Flying boat
L—Land plane
M—Monoplane
O—Open
S—Seaplane Engine Make P & W-Pratt & Whitney Engine Type
A-H—Air cooled horizontally opposed cyls.
A-L—Air cooled in line
A-R—Air cooled radial
L-L—Liquid cooled in line
L-V—Liquid cooled Vee type
L-W—Liquid cooled W type

Starter Make Ecl—Eclipse Hey—Heywood

Method of Starting
CA—Compressed Air
EM—Electric Motor.
G—Gas starter
HC—Hand Crank
HM—Hand Magneto
In—Inertia
PS—Propeller Swinging
Propeller Material
A—Aluminum
C—Composition
Du—Dural

S—Steel W—Wood W-C—Wood & Composition

PAACFFGHH

Battery Make
D-C—Dry Cells
Ed—Edison
Eve—Eveready
Exi—Exide
Lab—Labinal
RV—Ray Vac
Sle—Slem

WORLD-Continued



PE	RFO		ANC									EQU	I P M	ENT						M	ATE	RIAL		
를 구	Load)	1 1	FuelContionat C Speed	ruising With	ks	Make	de			Prope	ller	Electi	ical		Brakes		W	heels		Wings		Fu	elage	PLANE,
at Sea Level With Full Load M.P.H.	Cruising Speed 3000 Ft. (Full L	Landing Speed (Full Load)	Gas (Gallens per Hr.)	Oil (Gallons peer Hr.)	No. of Fuel Tanks	Cabin Heater M		Provided?	Provided?	Make	Material	Battery Make	Plane Wired for Lighting?	Make	Fitted to Undercarriage Wheels?	Fitted to Tail Wheels?	Make	Size (Foreign Planes Wheel Sizes are Metric)	Ribs	Spars	Covering	Structure	Covering	MAKE AND MODEL
													Al	MEF	RICA									
33 33 29 21 22 106 115 146 153 137 115 138 130 132 152.5 130.0	106 106 103 97 98 85 92 123 126 116 100 118 105 107 122	60 60 59 48 48 49 52 57 54 42 50 50 47 57 64	24.8 24.8 20.0 10.0 6.0 6.0 112.0 60.0 27.0 28.0 21.0 15.5 45.0 60.0	1.14 1.44 .55 .5.5 .22 .22	3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ow Ow	rn j	Y Y Y Y Y Y Y Y	N Y Y Y Y Y Y Y Y Y Y Y	Ha Ha Ha Ha Ha	A	Wil. Wil. Wil. Exi Exi Exi Exi Opt. Opt.	0	A-P. A-P. Ben. Sau Ben.	Y. Y. Y. Y. Y. Y. Y. Y. Y. Y. Y. Y. Y. Y	No No No No No No No No	Ben. Ben. Ben. Ben. Ben. Ben. Ben. Ben.	. 42x6 30x5 28x4 22x10.4 6.50x10 20x9.44 54x12 44x10 36x8 36x8 32x6 32x6 32x6 36x8 36x8	W W W W W W L-W L-W L-W L-W L-W Du-C. Du-C.	W.W.W.W.W.W.W.W.W.W.Du-C.Du-C.Du-C.Du-C.	F. F. F. F. F. L-W L-W L-W L-W L-W L-W L-W L-W L-W L-W	S	F. F. F. F. F. F. F. F. F. F. Alc. Alc.	Fairchild 71- Fairchild 71-A Fairchild KR-34-C Fairchild KR-34-C Fairchild KR-31-B Fairchild KR-21-B Fairchild KR-21-B Fokker AF-32 Fokker AF-10A Fokker XIV Fokker Super-Univ Ford 4-AT-E Ford 5-AT-C-S
106.0		40	6.34	1				Y	Y	Har	W		Y					. 24x4	Al	W		S	F	Great Lakes2T-1A
85.0 112 120 90 70 80 90	80 95 75 60 70 80	28 46 48 41 22 26 26	15.0 20.0 9.5 1.8 1.8 3.6	1.0 1.0 .1 .0	5 1 8 1 8 1	No No	1	Y	Y	Ha Ha Am.P. Own Own	S S W W W	Exi Exi Eve.	Y Y Y Y Y	Own. Opt. Opt. Opt.	Y Y Y	No No No	Ben. Ben°. A-P. Own	. 32x6 . 32x6 . 6.50x10 . 20x3 . 20x3	Du Du PS W W	W W W L-W. L-W.	F. F. F. F. F. F.	S	Du Du Du L-W, F. L-W, F. L-W, F.	Heath. Ireland N-2-B Ireland N-2-C Ireland P-2 Irwin S-P-1 Irwin F-A-1 Irwin 44
105 125 124 124 140 110	96 105 105 105 115	48 58 56 56 58 38 38	6.5		. 3	01	wn	Y Y Y Y Y	Y Y Y	Ha Ha Ha Ha Har Har.	Du., Du., Du., Du., W., W.,	Stu Stu	Y Y Y	No No No Ben.	Y	No	Bud K-H K-H Ben K-H K-H	8.50x10 32x6 32x6 32x6 44x10 26x4 26x4	W	W	F. F. F. F. F. F. F. F. F. F. F. F. F. F	DuDuDuSSS.	. Du Du	Keystone Commuter K-8 Keystone Airyacht CZ-6 Keystone Airyacht CZ-6 Keystone Airyacht CZ-6 Keystone Patrician K781 Kittyhawk B- Kittyhawk B-
135 150 150 175 190 190 125 101 104 108 102	110 120 120 135 150 150 110 82 85 87 85	45 45 55 55 60 58 30 35 32 32 38				2		Y	Y Y Y Y Y	Ha Ha Ha Ha Ha Ha	Du.	Exi	Y Y Y Y Y	Ben. Ben. Ben. Ben. Ben.	Y Y Y Y Y			8.50x10	W W W	W W W W W W S W W W	F. F. F. Du. F. F. F. F. F. F. F. F. F. F. F. F. F.	S S S Du	Du,	
118 125 114 134 115 115 115	90 96 96	62. 61. 60. 42.	0		25	1 N	0	N N N Y Y	Y Y Y Y Y Y	Ha Ha Ha Ha Opt	A A W . W . W . W .	Wil. Wil. Wil. Wil. No No	Y Y Y Y	No No No No No Ben. Ben.	No	No No No	Ben. K-H Ben. Ben.	32x6 28x4 24x4°	Du-T	Du-C Du-C Du-C S. L-W	F	Du Du S	Du	Martin. PM- Martin. PM- Martin. P3M- Martin. XTSM- Mercury. CM- MohawkN.PintoM-I-CV MohawkN.PintoM-I-CV
110 110 110 105 95 98.		38 38 45 45 45	17.0 17.0 17.0 7.1 7.1 7.1	5 .	9 9 4 4 4	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Y	Y Y Y Y Y	Har. Har. Har. Am.P Ha. Ha.	S	Exi Exi Exi No No	No.	Sau.	Y Y Y Y No	No No No	K-H K-H	32x5 32x5 32x5 6.50x10 26x4 26x4	W	W W W	F. F. F. F.	Du-C. Du-C. Du-C. Du-C. Du-C.		New Standard. D-25 New Standard. D-26 New Standard. D-27 New Standard. D-29 New Standard. D-29 New Standard. D-29 New Standard. NT-
105	87	42	5.4	5 .	25	1 .			Y	. Am.F	S		Y				K-H.	24x3	Al	. Al	F		F	Nicholas-Beazley NB-4 Nicholas-Beazley NB-4
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128 128 131 142 142 139 139	112 112 115 119 119	34 34 35 35 35 35 35 35 35				2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Own Own Own Own	Y Y Y Y Y	Y Y Y Y Y	Ha Ha Ha	988888	Opt.	Y. Y. Y. Y. Y.	Go Go Go Go	Y Y Y Y Y	No No No No No	Go Go Go Go Go	30x13 30x13 30x13 30x13 30x13	W,L W,L W,L W,L W,L	W L-W W L-W W L-W W L-W W L-W W L-W	F. F. F. F.	S	F. F. F. F. F. F.	Shamrock 3-4C-1 Shamrock 3-4W-1 Shamrock 3-5W-2

Wil-Willard

Propeller Make
Am-P—American Propeller Co.
As—Airscrew Co.
C-R—Curtiss Reed
Fl—Flottorp
F-R—Fairey-Reed
Gar—Gardner
Ha—Hamilton Standard
Har—Hartzell

Hei—Heine
Lev—Levassore
Mer—Merville
Par—Paragon
Rat—Ratier
Sch—Schwarz
Ste—Storey
Sup—Supreme
Wat—Watts

Brakes Make A-P—Aircraft Products

Ben—Bendix
Dha—Dhainant
Dun-B—Dunlop-Bendix
Fas—Fast
Ge—Goodyear
Mar—Marelli
Mes—Messier
Pal—Palmer
Sau—Sauzedde

Wheels Make AmW—American Wire Wheel

A-P—Aircraft Products
Bud—Budd
Dun—Dunlop
Dun—Dunlop
Elek—Elektron
Fas—Fast
Ge—Goodyear Air Wheels
Han—Hanriot
Joh—Johnson
K-H—Kelsey Hays
Mes—Messier
Pal—Palmer
P-D—Palmer, Dunlop

Sau-Sauzedde

Structure and Covering Materials
Al—Aluminum
Alc—Alclad
Du—Dural
Du-C—Dural Channel
Du-T—Dural Tube
F—Fabric
L-W—Laminated Wood

PS—Pressed Steel Cha S—Steel Tube SA—Sheet Aluminum

Wings Type
D—Demountable
F—Folding
R—Rigid

Cabin Heater Lab—Labinal Lam—Lambert



AIRPLANES OF THE

							GENE	RAL								F	NG	INE			
PLANE,			P		1		Overa	ll Dimens	ions	(þig	90	W	eigh	ts		F					ng
MAKE AND MODEL	ATC Number or Other Gov't Approval	Type	Specially Designed or Equipped for	Price \$	Total Seating Capacity	Cu. Ft. Capacity of Cargo Com- partment	Length (Ft. Ins.)	Height (Ft. Ins.)	Width (Ft. Ins.)	Wings (Folding, Demountable, Rigid)	Area Main Wings (Sq. Ft.)	Empty (Lbs.)	(Lbs.)	Actual Pay Load (Lbs.)	Pay Load Per Engine Hp. (Lbs.)	Engine Make, Model and Number Fitted	Cooling & Type	Total Hp.	Engine R.P.M.	Propeller R.P.M.	Method of Starti
•							A	MER	ICAN	1—C	Cont.										
Series S	126 43 44 42 238 Apl	CA. CA. CA. OLM. OLM. OLM. OLM. OLB. OLB. CLM. CLM. CLM. CLM. CLM. CLM. CLM. CLM	C-1	3995 4495 4495 1995 5975 7750 9750 5995 8405 10495 10495 25900 1995 2950 4250 5350	4 4 4 11 10 2 2 2 3	6.8	31-0 30-11 42-10	11-3 13-10 6-10 6-10 6-10 10-6 8-8 8-10 9-0 8-9 8-9 8-9 8-9 8-9 8-12-0 12-0 8-10 8-10 8-10 8-10 8-10	52-0 33-4 33-4 33-4 45-9 39-8 32-0 32-0 32-0 41-8 41-8 41-8 60-0 30-11 30-11 30-11 31-0 31-0 32-8 32-8	D D D D D D R R	350 720 720 729 148 148 148 150 200 292 234 234 234 490 490 296 296 296 240 240 300 300 300	6550 1 7500 1 1020 1020 1152 1983 525 1650 1741 2325	0480 2500 1592 1592 1779 3753 929 2618 2700 3515	Var. 170 170 170 190 195 370 380 Var. Var. Var. Var. Var. 170 170 170 170 170 170 170 170 170	Var. Var. 2.27 2.27 2.27 2.42 4.87 2.2 1.7 Var. Var. Var. Var. Var. 1.98 1.89 1.54 2.49 2.49	1-P&W Wasp Jr 2-P&W Wasp 2-P&W Wasp 2-P&W Hornel 1-Kinner K-1 1-Kinner K-1 1-Warner Searal 1-P&W Wasp 1-Continental A-4 1-Wright. J-1 1-Wright. J-1 1-Lycoming 1-Wright 1-P&W Junio 3-Lycoming 1-Uright 1-P&W Junio 3-Lycoming 1-Curtiss OX 1-Warner 1-Axelson. 1-Wright. 1-Axelson. 1-Wright. 1-Axelson. 1-Wright. 1-Hisson. 1-Wright. 1-Hisson. 1-Wright. 1-Hisson.	A-R. 6 A-R. 6 A-R. 6 A-R. 6 A-R. 6 A-R. 6 A-R. 7 A-R. 8 A-R.	840 1150 75 75 1100 450 465 165 225 210 240 300 630 630 90 110	1950 1950 1725 1725 1850 2000 2000 2000 2000 2000 2000 2000 2	1950 1725 1725 1850 2000 2000 2000 2000 2000 2000 2000 2	CA. In In In In In In In In In In In In In
aylor Cub. E 2 aylor Chummy B 2 haden T-4	2-114	CLM.	Sp C-T. C-T,Fr,-	1295 3985 9000	2	None None 5.8	21-9 22-6 30-10	6-8 7-6 8-11	35-2 34-6 4-0	R R	185 165 303	464 1082 2390	83: 164: 380	2 170 3 170 0 850	4.25 1.89 2.9	1-Continental A 4 1-Kinner K- 1-Wright Whirl J6-	0 A-H. 5 A-R. 9 A-R.	. 46 90 300	1810	2500 1810 1800	PS. PS. In
ought Corsain	USN	OLB.	Ob		2 2		24-10 28-6	10-2 11-4	36-0 36-0	R	320 320	2250 2550	3756 4056	0		1-P&WWas 1-P&WWas	n A-R.	425	2000	2000	In
Vace RNF Vace InF Vace CSO Vace CSO Vace CTO Vhite CC Vhite S30	311 345 240 257 Pending Pending Apl	OLB. OLB. OLB. OLB. LM. LM.	C-T. C-T. C-T. C-T.	4250 4285 7335 8525	3 3 2	2 2 7 7	21-0 20-9½ 22-7 22-7 18-4 18-4 18-11	8-9 8-9 9-0 9-0	29-6 29-6 30-7 30-5 31-1 31-1 35-0	R R R R R	241.4 241.4 288.0 227.0 130.0 130.0 159.0	1150 1171 1628 1677 683 702 533	260 260 114 112	7 358 358 Var. 0 Var. 2 3	3.2 2.8	1-Warner Scara 1-Kinner B- 1-Wright R-76 1-Wright R-76 1-LeBlond 6 1-Velie M 1-Szekely SR	b A-R 5 A-R 0 A-R 0 A-R 0 A-R 5 A-R 3 A-R	110 123 240 240 66	5 1900 0 2000 0 2000 5 1910 5 1950	1850 1900 2000 2000 1910 1950 1750	PS. HM. HM. PS.
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ABBREVIATIONS:
General

O-Others used
Apl-Applied for
AT-Approved Type
C-A-Certificate of Approval
Y-Yes
N-No
Var-Varies
Opt or O-Optional
Designed for
AA-Aerial Advertising

Bo—Bombing
C-T—Civilian Training
Fr—Freight
Ma—Mail
Mi—Military Training
Ob—Observation
Pa—Passenger
Pa—Photography
Sp—Sport
Tr—Transport

Type of Plane
A—Amphibion
B—Biplane
C—Cabin
F—Flying boat
L—Land plane
M—Monoplane
O—Open
S—Seaplane

Engine Make P & W-Pratt & Whitney

Engine Type
A-H—Air cooled horizontally opposed cvis.
A-L—Air cooled in line
A-R—Air cooled radial
L-L—Liquid cooled in line
L-W—Liquid cooled to line
L-W—Liquid cooled W type

Starter Make Ecl—Eclipse Hey—Heywood

Method of Starting
CA—Compressed Air
EM—Electric Motor.
G—Gas starter
HC—Hand Crank
HM—Hand Magneto
In—Inertia
PS—Propeller Swinging
Propeller Material
A—Aluminum
C—Composition
Du—Dural

S—Steel
W—Wood
W-C—Wood & Composition

Battery Make
D-C—Dry Cells
Ed—Edison
Eve—Eveready
Exi—Exide
Lab—Labinal
RV—Ray Vac
Sle—Slem

WORLD-Continued



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Automotive Industries

February 28, 1931



AIRPLANES OF THE

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MAKE AND MODEL	ATC Number or Other Gov't Approval	Туре	Specially Designed or Equipped for	Price \$	Total Seating Capacity	Cu. Ft. Capacity of Cargo Com- partment	Length (Ft. Ins.)	Height (Ft. Ins.)	Width (Ft. Ins.)	Wings (Folding, Demountable, Rigid)	Area Main Wings (Sq. Ft.)	Empty (Lbs.)	Full Load (Lbs.)	Actual Pay Load (Lbs.)	Pay Load Per Engine Hp. (Lbs.)	Engine Make, Model and Number Fitted	Cooling & Type	Total Hp.	Engine R.P.M.	Propeller R.P.M.	Method of Starting and Starter Make
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Designed for AA—Aerial Advertising

ABBREVIATIONS:
General
Odhers used
Apl—Applied for
AT—Approved Type
C-A—Ce. tificate of Approval
Y—Yes
N—No
Var—Varies
Opt or O—Optional
Designed for

Be-Bombing
C-T-Civilian Training
Fr-Freight
Ma-Mail
Mi-Military Pursuit
M-T-Minitary Training
Ob-Observation
Pa-Passenger
Pe-Photography
Sp-Sport
Tr-Transport

Type of Plane
A—Amphibion
B—Biplane
C—Cabin
F—Flying boat
L—Land plane
M—Monoplane
O—Open
S—Seaplane

Engine Make P & W—Pratt & Whitney

Engine Type
A-H—Air cooled horizontally opposed cyls.
A-L—Air cooled in line
A-R—Air cooled radial
L-L—Liquid cooled in line
L-V—Liquid cooled Ve type
L-W—Liquid cooled W type

Starter Make Ecl—Eclipse Hey—Heywood

Method of Starting
CA—Compressed Air
EM—Electric Motor.
G—Gas starter
HC—Hand Crank
HM—Hand Magneto
In—Inertia
PS—Propeller Swinging
Propeller Material
A—Aluminum
C—Composition
Du—Dural

S—Steel W—Wood W-C—Wood & Composition

Battery Make
D-C—Dry Cells
Ed—Edison
Eve—Eveready
Exi—Exide
Lab—Labinal
RV—Ray Vac
Sle—Slem

WORLD-Continued



-	ERF	ORN	A A N	C E							EQU	IPA	A E N 1	Γ					M	ATE	RIAL		
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at Sea Level With Full Load M.P.H.	Cruising Speed 3000 Ft. (Full 1	Landing Speed (Full Load)	Gas (Gallons per Hr.)	Oil (Gallons per Hr.)	No. of Fuel Tar	Cabin Heater N	Exhaust Manifolds Provided?	Dual Control Provided?	Make	Material	Battery Make	Plane Wired	Make	Fitted to Undercarriage	Fitted to Tail Wheels?	Make	Size (Foreign Planes Wheel Sizes are Metric)	Ribs	Spars	Covering	Structure	Covering	MAKE AND MODEL
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Propeller Make
Am.P.—American Propeller Co.
As.—Airscrew Co.
C.R.—Curtiss Reed
Fl.—Flottorp
F.R.—Fairey-Reed
Gar.—Gardner
Ha.—Hamilton Standard
Har.—Hartzell

Par—Paragon
Rat—Ratier
Sch—Schwars
Sto—Storey
Sup—Supreme
Wat—Watts

Brakes Make A-P—Aircraft Products

Wheels Make AmW—American Wire Wheel

Elek-Elektron
Fas-Fast
Ge-Goodyear Air Wheels
Han-Hanriot
Joh-Johnson
K-H-Kelsey Hays
Mes-Messier
Pal-Palmer
P-D-Palmer, Dunlop

Structure and Covering Materials
Al-Aluminum
Alc-Alelad
Du-Dural
Du-C-Dural Channel
Du-T-Dural Tube
F-Fabric
L-W-Laminated Wood



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MAKE AND MODEL	ATC Number or Other Gov't Approval	Type	Specially Designed or Equipped for	Price \$	Total Seating Capacity	Cu. Ft. Capacity of Cargo Com- partment	Length (Ft. Ins.)	Height (Ft. Ins.)	Width (Ft. Ins.)	Wings (Folding, Demountable, Rigid)	Area Main Wings (Sq. Ft.)	Empty (Lbs.)	Full Load (Lbs.)	Actual Pay Load (Lbs.)	Pay Load Per Engine Hp. (Lbs.)	Engine Make, Model and Number Fitted	Cooling & Type	Total Hp.	Engine R.P.M.	Propeller R.P.M.	Method of Starting and Starter Make
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ABBREVIATIONS General —Others used Apl—Applied for AT—Approved Type C-A—Certificate of App Y—Yes N—No Varies Opt or O—Optional Designed for AA—Aerial Advertising	oroval	C-T	ombing Civilian Tr eight dail lilitary Pu Military Tr bservation assenger hotography ort ransport	rsuit raining		Type of A—Amp B—Bipl C—Cabi F—Flyin L—Land M—Mo O—Ope S—Seap	phibion ane in ng boat i plane noplane n	W/Life and		A-H- A-R- L-L- L-V- L-W- Start Ecl-	ne Type Air coo Air coo Air coo Liquid Liquid Eclipse Heywo	d cyls. led in lir led radia cooled ir cooled V cooled	ne al n line Vee typ	oe .	CA- EM- G-(HC- HM- In- PS- Prop A-A- C-(ood of Starting Compressed Air Electric Motor. Gas starter Hand Crank Hand Magneto Inertia Propeller Swinging eller Material duminum Domposition Dural	Ba D Ea Ea Ea	-Steed-Work-C-I	Mak Dry C lison Everes xide abins ay Vs	ells	mposit

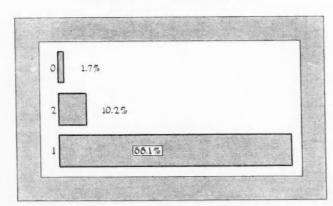
Var—Varies
Opt or O—Optional
Designed for
AA—Aerial Advertising

Engine Make P & W-Pratt & Whitney

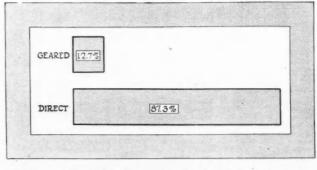
Airplane

(Based on Airplane

Number of Carburetors



Types of Propeller Drive



Figures Refer to Per Cent of Engine Models Using Factor

WORLD-Continued



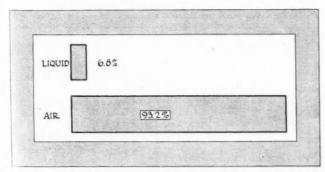
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C-R—Curtiss Reed Fl—Flottorp F-R—Fairey-Reed Gar—Gardner Ha—Hamilton Standard Har—Hartzell

Engine Trends

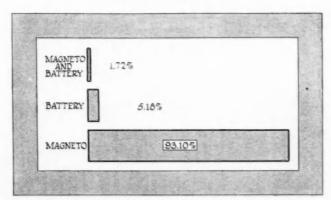
Engine Table, Page 380)

Types of Cooling Systems



Figures Refer to Per Cent of Engine Models Using Factor

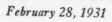
Types of Ignition



AIRPLANE ENGINES

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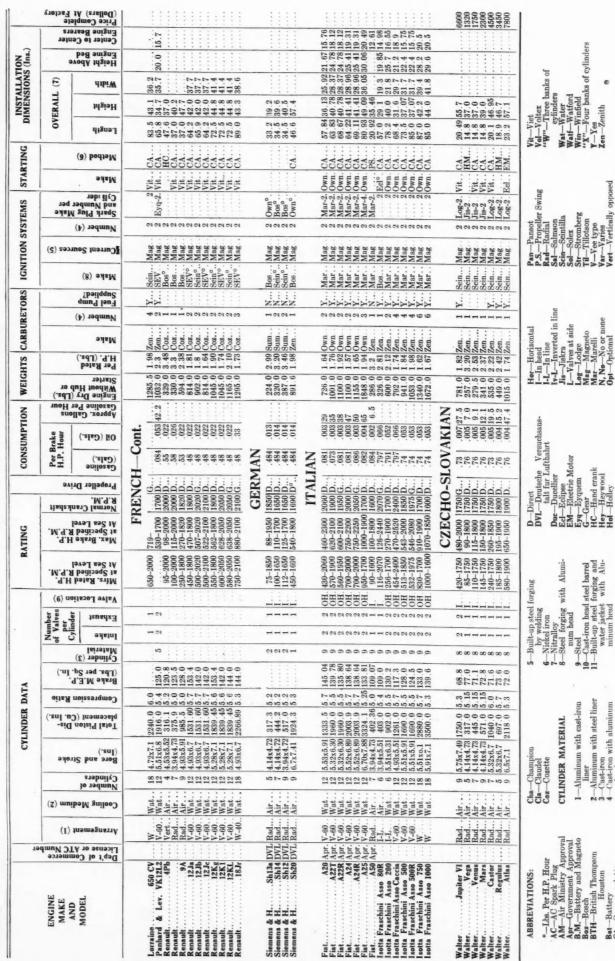
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				Allison Allison Allison Allison Allison Bakewell Wing Bakewell Wing Gameron Chervolet Continental Crosicy Curtiss Challen Crosicy Curtiss Calena Curtiss Calena Curtiss Calena Curtiss Calena Curtiss Calena Curtiss Calena Curtiss Calena Curtiss Calena Curtiss Calena Curtiss Calena Light Tiger Light Tiger Kitt Lig	Wright



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	62 22 22 22 22 22 22 22 22 22 22 22 22 2		######################################	banks of street of c
94 54 69	282 282 282 282 282 282 282 282 282 283 283		84444888824888824888888888888888888888	Vit—Viet Vol—Voltex Www—Three ban cylinders Wat—Water Water—Water Water—Winfield "X"—Four bank Y—Ves
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11				Vir. WW.
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200	KIGS SKIGS		Pan-4. Pan-2. Pan-2. JAM 2. Pan-2. Pan-2. Pan-2. Pan-2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	ot al on illa berg on on cally opposed
81 81 81 81				Pansot -Pansot -Propeler & -Radial -Salmeon -Salmeon -Stromberg -Tillokson Vee type -Varies -Vertically
	44444444444		114444444444444	Pan—Paneot P.S.—Propell Rad—Radala Sal—Salmeon Scin—Scintill Str—Strombe Til—Tilloteor V—Vee type Varte—Vertice
Mag	WWW SEE STANFES STANFE		MARAN MARAN	Pan—Paneot P.S.—Propeller Rad—Radial Sal—Salmson Sal—Schrölin Sal—Schrölin Sal—Stromberg Til—Tillotson V—Vee type Var—Varicelly
Scin	BTH BTH BTH BTH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH BYH		SEEV SEEV Due. Due. Due. Due. Due. Due. Due. Due. Due. Due. Due. Due. Due.	
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	070787888378787878		000000000000000000000000000000000000000	Her—Horisontal —In head —In head —I—In line iv-I—In werted in line —Valves at sidden —Valves at sidden Mag—Magneto Mag—Magneto May—Magneto May—May May—Magneto May—May May—May May May—May May M
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-	24 43 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		0.086 0.0886 0.0	D—Direct DVL—Deutsche Versuchsans- Buc—Duedlier Ed—Edipse Eq—Edipse Eq—Eyquem G—Gest Fyquem G—Gest Fyquem G—Gest Fyquem Hey-Heywood Hel-Heywood
1900 D 10 1900 D 10 BRITISH		FRENCH		D-Direct DVI.—Deutenbe Ver BVI.—Deutenbe Ver Ed-Edipse Ed-Edipse EM-Electric Motor EW-Electric Motor EW-Electric Motor Hor-East ceank Hor-Esywood Hef-Holley
800 D.	1875 1770 1770 1770 1770 1770 1770 1770 17	E		D—Direct DVI—Deutsch talt fur I Duc—Ducellier Ecl—Eclipee EM—Electric M G—Gen HC—Hand crar Hey—Eleywood
33 2	1875 1700 1770 1770 0 2000 0 2000 0 2000 0 1900 0 1900 0 1900 0 2250 0 2250	E	2150 2150	Double Do
605-1900 1900 D 605-1900 1900 D BRITIS	86-2100 38-2600 50-2600 530-8000 531-8000 531-8000 531-2100 575-1300 575-1300 576-27		\$50-2180 \$50-2180 \$50-2180 \$195-2200 \$1195-2200 \$141-2700 \$141-2700 \$145-2700 \$155-1960 \$175-220	OR ORDERSTEE
	75-1875 34-2300 435-4000 445-4000 446-4000 515-4000 515-4000 85-1900 1105-1900 85-3000 8815-300 8815-3000 8815-3000 8815-3000 8815-3000 8815-3000 8815-3000 8815-3000		500-2150 500-2150 500-2150 500-2150 5150-2150 5150-2150 5150-2150 5150-2150 5160-2160 5160	ig Parit
525-1900 375-1900	75-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-		200-2 250-2	orging ith Alumi- iteel barrel orging and with Alu-
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132.	132. 134. 125. 125. 137. 137. 133.		23 28.8.8.8.8.8.8.8.9.9.9.9.9.9.9.9.9.9.9.9	
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יט יט			200 200 200 200 200 200 200 200 200 200	L'iron
1750.	410777777774 : 1222222		1296 67 1296 67 1229 45 1223 45 1211.93 1211.93 1211.27 1127 1127 1127 1127 1127 1188 1189 1188 1188 1188 1188 1188 1188 1188 1188 1188 1188 1188 1188	ERIA h cast h stee
6x678 618x678	0.00 to 10.00		6.1246.121 6.1246.121	OB MATE n with with
6x67 61/8x	2x4 - 2x4 -		### ##################################	Champi Champi Chaudel Cozette IDER 1 Inner
00	400000000440 : 515151515		25000000000000000000000000000000000000	Cha—Champion Cla—Champion Cla—Champion Ca—Cozette CTLINDER MATERIAL 1—Aluminum with east-iron iner 2—Aluminum with steel liner 3—Cast-iron with aluminum head
Air	AAir AAir AAir AAir AAir Wat Wat Wat		A Air Air A Air A r Air Air Air Air Air Air Air Air	999 P 7 777
Rad	Hor. Had. Rad. Rad. Rad. Rad. Rad. V-60 V-60 V-60 V-60 V-60			
R.B.				roval oval neto
	MAMAMA ANAMAMAMA ANAMAMAMA ANAMAMAMAM		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Gour App Appr Mag npeor
	5-E5 5- X		500 CV 250 CV 350 CV 350 CV 350 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 550 CV 6Mb 12.1h 12.1	NS P. F. P. P. P. P. P. P. P. P. P. P. P. P. P.
	Horne MK I I FN VIII I VIII I K FB X FBN MK III MK I XIV- X I X I X I X I X I X I X I X I X I X I			O _ N - N - D - N
	Horne piece VI FV F		Titan n Titan ter V	Per H. Spark Minis Minis Alice
	Horne Scoppion MK I. Jupiter VI F. Jupiter VII I. Jupiter VII I. Jupiter VIII. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XFB. Jupiter XII. Jupiter XIII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XII. Jupiter XIII.		2WE 2WE EB EB EB CC EC Tex 2WI FORM FORM FORM FORM FORM FORM FORM FORM	BREVIATIO Lba. Per H.I L-Air Minia Governma L.—Battery Bosch H—British 7 House
Wright CycloneR1820E	A. B. C. Scorpion MK. II. Bristel Jupiter VI FS A Bristel Jupiter VI FS A Bristel Jupiter VII FA Bristel Jupiter VII FA Bristel Jupiter VIII FA Bristel Jupiter X FB Bristel Jupiter X FB Crrus Herrors Crrus Herrors Crrus Herrors Crrus Herrors KN paper "Lion" Series VII A Napier "Lion" Series VII A Napier "Lion" Series VII A Relis R. "F" XI.XII.XIV-MS Relis R. "F" XI.XII.XIV-MS Relis R. "F" XI.XIII.XIV-MS		Farman 12WE 500 CV Farman 12WE 250 CV Farman 7EC 150 CV Farman 7EC 150 CV Farman 12WI 550 CV Farman 12WI 550 CV Farman 12WI 550 CV Farman 12WI 550 CV Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Grone-Rhone Tian II 56C A Hispano-Suiza II 24 Hispano-Suiza II	ABBREVIATIONS: -Lia. Per H.P. Hour AC.—AC Spark Plug AM.—Air Ministry Approval Apr.—Government Approval B.M.—Bathery and Magneto Bat.—Bathery and Magneto Bat.—Bathery CA.—Compressed Air



ENGINES—Continued AIRPLANE



of cylinders

-Gear -Gear -Hand erank y-Heywood

2—Aluminum with steel liner
3—Cast-iron
4—Cast-iron with aluminum
bead

essed Air -Battery Compress

1-Aluminum with cast-iron

*—Lbs. Per H.P. Hour
AC—AC Spark Plug
AM—Air Ministry Approval
Apr—Government Approval
B.M.—Battery and Magneto
Bas—Bosch
Bas—Bosch
Bar—British Thompson

CYLINDER MATERIAL

Duc-Ect-E EM-EM-EM-EM-HC-G Hey-Hey-Hey-Hoy-

Airplane Structural Factors

Wood										of	Models
wood				k. v.							00.4
Aluminum Alloy .									×		21.6
Laminated Wood											10.9
Laminated Wood	and	W	00	d	 						3.8
Steel Tube					 						2.7
Pressed Steel											1.6

Spars

Wood			*	*			. 6		*					*		of Models
Laminated Wood																
Aluminum Alloy	,				i	3										9.22
Steel Tube																
Pressed Steel		 													×	1.08

Wing Covering

														er Cent
Fabric			 			*								Models 82.3
Laminated														
Aluminum	Alloy													4.3
Laminated														

Fuselage Covering

																				of Models
Fabric		,	× .			. ,							*	×	*		,		*	69.7
Aluminum																				
Laminated	Wood												. *							8.74
Laminated																				
Fabric and	Steel	1	1	h	17	m	iı	nı	11	m										1 16

Pay Load Per Engine Hp.

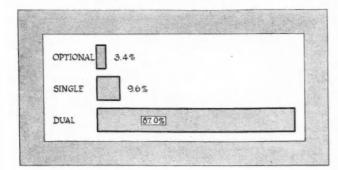
Up to and in	nelud	lir	12	r	2	3.0	0	1	b.											,	of	Models 24.0
2.01 lb.—3.0	lb.																					41.8
3.01 lb4.0	lb.						. ,						ř	×	×							
4.01 lb.—5.0	lb.			á			. ,					,	,									7.0
5.01 lb.—6.0	lb.							,			•					×				5	*	3.1
6.01 lb.—7.5	lb.																					0.8

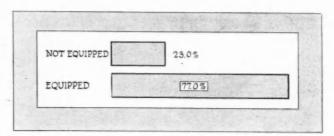
Fuselage Skeleton

Steel Tube :					×	*							of Models
Aluminum Alloy													
Wood													
Pressed Steel													1.08

Control Arrangement

Models Equipped with Brakes



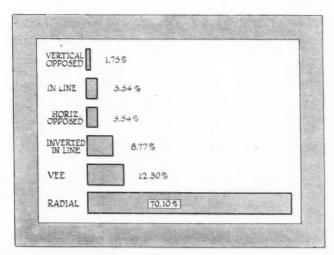


Airplane Engine Types Used

(Based on Airplane Engine Table, Page 380)

Cylinder Arrangement

Number of Cylinders



3 509% 6 509% 8 509% 2 678% 4 11.85% 12 13.55% 5 15.25% 7 15.25% 9 22.05%

In Per Cent of Models Using Each Type

HIGHWAYS



Mileage Statistics-Highways of the World

(Automotive Division, U. S. Department of Commerce)

Continent and Country	Unimproved Earth	Earth Sand Clay, or Gravel Graded and Drained	Macadam	All Other Including "Not Specified"	Total	Continent and Country	Unimproved Earth	Earth Sand Clay, or Gravel Graded and Drained	Macadam	All Other Including "Not Specified"	Total
WORLD TOTALS		2-14-11-14				ASIA					
merica	2,664,794	768,743	118,143	243,476	3,795,156	Afghanistan				1,561	1,56
frica	107,294	118,351	21,606	10,417	257,668	Arabia	1,025	30			1,05
sia		82,442	114,469		1,072,408	British Malaya		0.101	4,562		7,14
urope	61,702	1,230,735	372,110	788,614	2,453,161	Ceylon		2,401	4,909		15,91
ustralia, New Zea- land and Oceania	121,716	1,583	37,993	219 508	380,800	Chosen (Korea)		$33,738 \\ 10,757$	1,072	10	34,81 10,76
land and Oceania	121,110	1,000	01,000	210,000	000,000	French Indo-China		6,460	8,900		20,41
Grand Total	3.168,426	2,201,854	664,321	1,924,592	7.959,193	British India and The		0,100	0,000	****	20,11
	.,,					Punjab			64,007	1,030	225,28
AMERICA					1	Iraq	4,434	316	50		4,80
laska		1,620			1,620	Japan		****	****	659,215	659,21
rgentina		41,500	2,000	88,197	131,697	Macao Netherland East In-	****	9	****	9	
olivia	822	2,732	30	****	3,584	dies		11,100	25,050	25	36,1
razil ritish Guiana	72,312	2,095	963	127	75,497	Palestine	833	11,100	423		1,2
ritish Gulana	19	325	52	****	325 65	Persia	1,864	5,903	186		7,9
ritish Honduras ritish West Indies.		3,534	5,530	132	9,395	Philippine Islands	****	6,278	1,051	525	7,8
anada		201,944	4,349	4,376	390,060	Siam		654		* * * *	_ 6
hile			358	133	24,414	Syria	3,900	0.000	1,450	70	5,4
olombia		19,014	243	4	19,261	Tiawan (Formosa)		2,500	200	****	9,3
osta Rica	****	31	45	85	161	Turkey		2,296	320 550	18	19,5 1,1
uba	****	51	1,323	616	1,990	Lebanon			1,939	114	2,0
ominican Republic.		****	686	1,390	686 1,390				2,000	111	
cuador rench Guiana	28				28	Total	212,920	82,442	114,469	662,577	1,072,4
ench West Indies		78	505		583						
uatemala			73	1,454	1,527						
aiti		1,066	****	6	1,072	EUROPE					
onduras	165		196		361	Aegean Islands				626	
exico		****	****	62,137	62,137	Albania		1,566	****	020	1.
etherland West	t	450			179	Austria		2,000	****	18,140	18,
Indies		173 610	10		173 620	Azores		410	420	10	,
ewfoundland		050			350	Belgium			2,257	16,637	18,
icaragua anama	* * * * *	58	53	568	679	Bulgaria			9,570	6	9,
araguay	2,648		3	****	3,684	Czechoslovakia		0.000	44,009	821	44,
eru	6,000		1,140	57	12,002	Cyprus		2,039	881	242	2,
orto Rico			449	631	1,080	Danzig Denmark	. 021	32 375	217 3,464	27,864	31,
alvador		101 000	00.100	1,605	1,605	Estonia		14,016	192	216	14,
nited States	. 2,361,798	481,290	99,426		3,024,233	Finland		18,956	28	10,353	29,
ruguay	. 20,317		709	66 170	22,487 2,211	France		380,173	22,369	2,486	405,
enezuelairgin Islands		170	****	3	179	Germany		130,363	74,564	12,552	217,
iigiii ibidiide	* ****					Gibraltar		0.000	1	14	
Total	2,664,794	768,743	118,143	243,476	3,795,156	Greece	17,485	6,605 5,143	11 555	75	6,
						Hungary	. 11,100	1,243	11,555	2,864	37,
AFRICA						Irish Free State		1,210	45,722	740	46,
lgeria	. 11,567		8,860	1,326	21,753	Italy			14,430	99,699	114.
nglo-Egyptian Sudar	n	225			225	Latvia	. 18,974	3,152	****	670	114, 22,
ngola elgian Congo					15,170	Lithuania	. 18,886	7,903			27,
elgian Congo		8,886	****		8,886	Luxemburg		300	2,178		2,
ritish Somaliland .		834	503	i	20,098	Malta and Gozo		****	322	6	
ritish West Africa anary Islands			278			Monago Netherlands		* * * *	10,563	4,971	15,
yrenaica	419		250		4 400	Northern Ireland		****	22,924		12,
gypt		3,760			3,965	Norway		23,297	20,027	46	23,
ritrea		1.539	493	1	2,033	Poland		108,288	32,741	11	141,
thiopia	. 1,300	1,100	55	3	2,458	Portugal			13,785	99	13
rench Equatoria		10,505			10,505	Rumania	. 5,736	23,770	36,816	31	66
Africarench West Africa	11.660			6		Russia		415,160			776
alian Somaliland.					5,278	Spain		62			54
inya				8,825		Sweden		80,842			
iberia		. 234			234	Switzerland		00,012		9.233	
ladagascar		. 1,520	2,185		3,705	United Kingdom				179,286	
Iaderia		. 100			497	Yugoslavia		7,040	17,245	29	24
lauritius			634		634						
orocco		. 562	3,351		3,914	Total	61,702	1,230,735	372,110	788,613	2,453
lozambique (Portu		. 5,809			5,809						
guese East Africa		9 070			0 707						
ortuguese Guinea .		1 7740				AUSTRALIA, NEW					
eychelles						ZEALAND, AND					
outh Africa North	-					OCEANIA					
ern and Souther	n					Australia	. 105,539		6,500		329
Rodesia)	. 43				8,506	British Pacific Island	s	115	35		
	of 58,89	9 25,986				Fiji	104				
	. 1	10 000			12,362	French Oceania	****				
panish Guinea				100		Guam		912		****	1
panish Guinea anganyika		mr.c	220	2							
panish Guinea 'anganyika 'ripolitania		. 759	232	34	1,025	New Zealand	16 072				
panish Guinea 'anganyika 'ripolitania 'unisia		3,728	3,389		7,117	New Zealand	16,073		30,629	1,731	48
outh Africa, Union of panish Guinea anganyika 'ripolitania 'unisia Jganda anzibar and Pemb		3,728	3,389		7,117 6,379	New Zealand Samoa Western Samoa	16,073	30	30,629	1,731	48
panish Guinea Panganyika Pripolitania Punisia Jganda		3,728 6,379	3,389	8'	7,117 6,379 238	New Zealand Samoa Western Samoa	16,073	128	30,629	1,731	48,

¹Includes 12,816 miles of asphalt and other bituminous surfaces, of which 9779 are bituminous concrete; 63,838 miles of concrete; 113 miles of stone block; 4470 miles of paving block; 346 miles of asphalt block, and 136 miles of wood block.



NEWS OF THE INDUSTRY

Austin Plans Rental Service

Will Operate Fleets of its Cars for Large Corporations

BUTLER, PA., Feb. 25 — Austin-Miles, Inc., proposes to operate fleets of Austin automobiles, under contract with the American Austin Car Co., Inc. The operating company will rent mileage service for light delivery and other uses, charging a fixed mileage rate for maintenance, oil and fuel. The rental, it is understood, will be at the rate of about four cents a mile.

The plan will be tried in Detroit, it was announced, as soon as 500 cars are available.

The manufacturing company will continue to build cars for the trade, however, according to the management.

This plan will be passed upon by a creditor's committee, which was told that there are now about 325 cars available for this mileage rental service.

Plymouth Increases Discount Schedule

DETROIT, Feb. 26—An increase of dealer discounts to a flat rate of 21 per cent has been put into effect by the Plymouth Motor Car Co., according to an announcement made this week. The increase is retroactive upon all cars in dealers' hands, and dealers will receive rebate credit on the new discount basis.

The new discount schedule of Plymouth replaces a former schedule carrying a spread of 17½ to 21 per cent, according to the number of cars accepted by the dealer. This schedule, until recalled, was expected to apply until Nov. 31, 1931.

Sales Drop Indicated

PHILADELPHIA, Feb. 26—Chevrolet ran 20 per cent ahead of Ford in registrations of new passenger cars in the 31 states from which final reports have been received. Total car registrations in this group of states show a loss of 32.5 per cent from January last year which points to a U. S. total for the month of about 121,000, as compared with 180,000 last year.

The News Trailer By Herbert Hosking

Durant will increase production 50% in March, says Alger * * * Ford has a new town-sedan with sloping windshield . . . listing at \$625 . . . very doggy, with plenty gadgets * * * it's Sir Malcolm Campbell now for the Daytona sandburner . . . he will devote time to touring Aussie and N. Z. for the benefit of the big Buy British bologna-business * * ex Lt. Al Williams has formed a company to build a speed plane . . . hoping for a drink out of the Schneider Cup * * * Charles P. Steinmetz, late great wizard of Schenectady's General Electric. was president of the first glider club in the U. S. * * * Dick Leavell of the Ah Ah (Harvard pronunciation) staff of timers, has been up at Lake Placid electrically timing the tobog-gan contests * * * C. L. Cummins will enter a Diesel-engined job in the next "500" at Indianapolis * * * Billy Arnold Plans to Drive . . . the Hartz car * * * Marshal Chang Hsueh-liang of the Manchurian gvt. has bought a Ford trimotor * * * Detroit News has bought an Autogiro * * * Captains Alfredo Paladino and Pedro Castex, members of an Argentine commission to inspect aviation centers of the U.S., were recent visitors at the Glenn L. Martin plant in Baltimore * * * Boston distributors had an unusually elaborate version of their traditional Washington's Birthday Open House

* * * St. Louis staged the first aerial fashion show . . . including 1931 models of the Curtiss-Wright line * * * Gasoline prices are being clipped here and there about the land * George E. Smith, Reo purchagent, has been elected head of the Lansing Shrine Club * * * the Packard distributor's showroom in Chicago was bombed during a recent Civic Rash . . . police, of course, were unable to solve the mystery of whodidit * * * George A. Downey has been named to succeed H. A. McNally, resigned head of the Graham-Paige Legion * * * Captain Herbert J. Ratcliffe, house manager of the Royal Automobile Club, London, sailed for home on the Bremen * * * Keystone Automobile Club claims Pa. State Highway Patrol is being used to collect bad checks instead of patrolling highways.

Patent Snarl Looms As Connecticut Cites

Ignition Device Maker Claims Ownership of Basic Coverages

MERIDEN, CONN., Feb. 25—With the receipt of a telegram today from C. W. Curtiss, president of the Connecticut Telephone and Electric Corp., Automotive Industries confirmed published statements in the Meriden newspapers that the company had written almost every leading motor vehicle producer, alleging infringement of ignition patents held by the Connecticut Company. The companies cited include Delco-Remy and Electric Auto-Lite, and users of ignition products of these companies.

Mr. Curtiss' letter asks that the companies cited cease infringement, and reimburse Connecticut for damages sustained. It also requests that each company cited state its position in the matter.

Asked whether his company intended to start formal suit, and in what court it would take place, Mr. Curtiss replied that his company had no further comment to make for the present.

The Connecticut Telephone and Electric Co. is a subsidiary of the Commercial Instrument Co., of which Vincent Bendix is chairman of the board, and an active stockholder. It is understood, however, that there is no corporate connection between Commercial and the Bendix Aviation Corp., on the board of which Delco-Remy is represented, and C. O. Miniger, president of Electric Auto-Lite, is a member.

Abstracts of the patents involved and to which Connecticut claims sole ownership, are appended. The abstracts were made by P. M. Heldt, engineering editor of Automotive Industries staff, and while not guaranteed, are believed to be accurate.

The Connecticut Telephone & Electric Corp. has six patents relating to ignition apparatus, taken out in the names of Ernest C. Wilcox, Burton L. Lawton and John F. Cavanagh. All except one of these patents were issued during the years 1914-1917, while the last one, which bears the title Gas Engine Igniter, does not seem to be primarily of an automotive character

(Continued on next page)

Patent Snarl Looms As Connecticut Cites

(Continued from page 385)

and was issued in 1926. A brief review of the subject of each patent is given in the following:

given in the following:

No. 1,113,850—lgniter Mechanism. Ernest C. Wilcox and Burton L. Lawton. Application filed Jan. 16, 1914; issued October 13, 1914.

This patent appears to cover two points in battery ignition units. In combination with all of the usual parts of such instruments including a case for same there is claimed "an opening in the side of said case laterally of the ends of said contact points to permit a tool to be inserted between said points, and a cover for said opening mounted on said case." while three of the claims cover the construction of the breaker arm, claim 4 containing the following: . "two contact points, one fixed and the other movable, an arm carrying said movable contact point, said arm comprising two spaced plates connected at one end, a pivot mounting for the other end of said arm, an anti-friction bearing between said arms arranged for engagement by said cam to move said movable point."

cam to move said movable point."

No. 1,138,522—Electrical Ignition Apparatus. Ernest C. Wilcox. Application filed June 18, 1914. Issued May 15, 1915. Claim 2 reads: "In an igniter apparatus a rotatable shaft, a housing supported thereon, a cam driven by said shaft, an interrupter unit including interrupter parts arranged outside of said cam, said unit being arranged to be bodily applied to and removable from said housing, means for holding said unit in operative position in said housing and a terminal carried by said housing and insulated therefrom, and arranged to be electrically connected with one of said interrupter parts, and a distributor element comprising a part carried by said housing and another part detachably carried by said shaft."

Claim 4 covers, in combination with the

another part detachably carried by said shaft."

Claim 4 covers, in combination with the foregoing, "a condenser element in the form of a unit, said distributor unit being arranged to be carried by said housing and being detachable therefrom, with means for electrically connecting said condenser with said terminal."

denser with said terminal."

No. 1,182,867. Ignition Mechanism. Ernest C. Wilcox. Originally filed June 18, 1914, but divided and this application filed Dec. 4, 1914. Issued May 9, 1916.

This patent carried only one claim which reads as follows: "In an ignition apparatus of the character described, a supporting shaft, a housing revolubly mounted thereon, and supported thereby, interrupter mechanism carried within said housing and protected thereby, a condenser also carried within said housing and protected thereby, a terminal screwentered into one side of said housing and insulated therefrom, an electric connection inside the housing from said terminal screw to one part of said interrupter, and a brush inside the housing connected between the terminal screw and one side of the condenser, said connections being thereby all wholly protected by said housing."

housing."

No. 1,204,104—Ignition Mechanism for Internal Combustion Engines. Ernest C. Wilcox and John F. Cavanagh. Application filed Jan. 14, 1916. Issued Nov. 7, 1916. This patent covers an ignition unit in which the housing itself is stationary and contains a carrier movable relative to it, for changing the timing. Claim 2 reads: "In an ignition mechanism a stationary timer housing, a camshaft projecting thereinto and having a cam arranged therein, a timer element removably mounted in and on said housing and angularly adjustable therein relatively thereto and to said camshaft, and means arranged externally of said timer housing and mounted independently of said timer element for shifting said timer element."

No. 1.217.566—Distributor for Electric

ment for shifting said timer element."

No. 1,217,566—Distributor for Electric Ignition Systems. John F. Cavanagh. Application filed June 14, 1916. Issued Feb. 27, 1917.

This relates to means for ventilating the distributor housing, Claim 1 reading: "A distributor housing comprising housing members in edge-to-edge relation, one of said members having a passage formed in the edge thereof in communication with the interior of the housing." In another claim there is mention of a lip on the upper section which protects the entrance to the ventilating passage.

No. 1,586,135—Ernest C. Wilcox. Application filed Sept. 12, 1923. Issued May 25, 1926.

This patent has only a single claim which reads as follows: "As an article of manufacture a breaker cam for an agniter including a sleeve-like member having cam surfaces thereon intermediate its ends, and having an annular ring-like projection thereon at one end and a portion of reduced cross section at the opposite end."

G.M. and Holdens Plan Combination

Australian Activities of Both to be United

NEW YORK, Feb. 26—General Motors (Australia) Pty., Ltd., and Holdens Motor Body Builders, Ltd., largest car body manufacturer in Australia, have been negotiating for a merger of interests and the organization of a new company to be known as General Motors and Holdens, Ltd., according to Graeme K. Howard, general manager of the General Motors Export Co. Negotiations are now awaiting only the formal approval of the stockholders of Holdens, who will meet March 5.

The new company will combine the activities of General Motors (Australia) with the Holden organization, which manufactures bodies for all American car manufacturers selling in Australia, with the exception of Ford, and for a number of British car makers. Shareholders of Holdens will receive stock in the new company. E. W. Holden, chairman and managing director of the Holden organization, will be chairman of the board of the new company and will direct its bodybuilding activities.

Sir Wallace Bruce, A. G. Rymill, and Sir John Butters of Holdens, and A. N. Lawrence, managing director of General Motors (Australia), will be additional members of the board of the new company. The body plant owned by Holdens, occupying 40 acres, is located at Woodville, Adelaide,

South Australia.

Hudson Denies Canadian Plans DETROIT, Feb. 26—The Hudson Motor Car Co. today denied published reports that it would establish a plant Windsor, Ont., Canada, as a result of the Canadian tariff ruling, which in effect, increases the cost to dealers of cars imported into Canada.

Gardner Agency Gets 1930 Harvard Award

Aluminum Co. Campaign is Basis for Selection

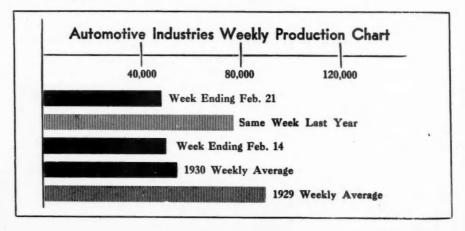
NEW YORK, Feb. 26-For the fourth time in six years, the Harvard University award for "conspicuous excellence in the planning and execution of an advertising campaign" will be awarded to the Gardner Advertising Co., New York. The award was based on an advertising program carried out by the Aluminum Co. of America, Pittsburgh, for which the Gardner Advertising Co. prepared and placed the copy, and developed a comprehen-

sive plan of presentation.

A unique feature of the campaign was the use, for the first time in a regular publication press - run, of aluminm ink in both general circulation and business magazines. Heretofore the use of aluminum ink has been restricted to specially prepared inserts run on a separate press from the bulk of the publication in which it was to appear. The agency points out that the use of aluminum ink to present the story of aluminum, the commodity, in print, is perhaps the only example of a case in which one of the basic metals has been used to advertise itself.

The Alcoa campaign, in its preparation faced certain fundamental difficulties from the outset. The task of the copy placed in all types of magazines was to keep before the consumer the desirability of using aluminum products in all places where lightweight, strength and resistance to corrosion are desirable properties.

The actual presentation of the Harvard Award will be made Friday at Cambridge. Present to receive it will be: H. S. Gardner, president of the Agency; Howard L. Spohn, vicepresident; S. K. Colby, vice-president of the Aluminum Co. of America; W. C. White, advertising manager, and C. C. Ponnes, assistant advertising manager. Saturday the agency will be host at a luncheon at the Hotel Commodore, New York, at which Roy H. Hunt, president of the Aluminum Co. of America, will present the congratulations of his company to the agency.



Steel Demand Continues Gain

Automotive Inquiries Aid Finishing Mills Position

NEW YORK, Feb. 25-Weekly estimates of the rate at which the steel industry is operating continue to reflect moderate gains. Finishing mills, however, appear to have improved their position more impressively so than primary mills, and this improvement is almost altogether due to the broadened demand of automotive con-

Sheet mills have a better backlog of specifications for March operations than they have had in some time. It is not so much unfilled tonnage on books that is reassuring as the increase in the flow of current orders coming in from day to day. A good deal of this business consists of small quantities on which immediate shipment is wanted, but in the aggregate this sort of buying makes up quite a good-sized tonnage.

Announcement that one of the leading "independent" producers of full-finished automobile sheets is extending operations by resuming activities at the company's Michigan plant furnishes the best proof of the general growth in automotive buying. Strip mills also are doing better, although demand for cold-rolled strip is still backward in comparison with other descriptions of finished steel.

Demand for cold-finished steel bars and for automotive alloy steels has made further gains. There is also better inquiry for bolts and nuts. Prices are holding fairly steady all along the line. Chicago district mills report better inquiries from tractor manufacturers. Even the more conservative element in the steel market considers the present rate at which new business is coming in as supporting the current rate of operations.

ring the current rate of operations.

Pig Iron—Nearly all of the markets report gains in orders from automotive foundries. Blast furnaces are working stock piles lower. The market is steady.

Aluminum—Demand for piston metal has broadened further. According to London reports, German and Swiss aluminum interests have come to a mutually satisfactory agreement with the result that the German market is on a somewhat higher basis.

Copper—Custom smelters were asking 10½c, delivered Connecticut Valley points, at the beginning of the week. The leading fabricating interest has revised prices on wire and other products upwards to conform with the recent advances in the market. Statistics of world output reflect curtailment of output. Rumor has it that further integration of the copper industry is impending.

Relay Has New Model

LIMA, OHIO, Feb. 25-Model 100-B is the name of a new 5 to 71/2-ton chassis just announced by Relay Motors Corp. This new member of the Relay line is equipped with a Buda GF six-cylinder 4% x 6-in. engine mounted in unit with a Brown-Lipe plate clutch and a Brown-Lipe fourspeed transmission, a Relay axle, hydraulic four-wheel brakes and an 8-in. plate reinforced pressed steel frame.

Willys Sales Increase

TOLEDO, Feb. 24 - Advance orders of the Willys-Overland Co. indicate that March sales will be 40 per cent over February which is showing a similar gain over January business, it was announced by L. A. Miller, president, on his return from visiting distributors in the East.

Hug Using Spring Rockers

HIGHLAND, ILL., Feb. 26-An entirely new principle in front spring mounting has just been announced by the Hug Co. and put into production on its Roadbuilder trucks. Known as the Hug front spring rocker, this newly patented device is designed for application to trucks operating over uneven roads. Use of the rocker is claimed to allow the front axle to rock under the frame without twisting or breaking frame rails thereby relieving strain on engine supports or hangers and eliminating twist of cab, etc.

Diamond T Adds 2 Lines

CHICAGO, Feb. 25-Besides improving its entire 1931 line in appearance, Diamond T Motor Car Co. announces introduction of two newcomers to its family, a low-priced 1-ton model, designated as Model 216 and offered at \$695, and a 4-tonner, known as Model 750. Although rated at 1 ton, Model 216 actually carries a maximum gross rating of 8000 lb. It is powered by six-cylinder 3% x 44-in. Hercules engine, developing torque of 143 ft.-lb. at 800 r.p.m.

LaSalle is Improved

DETROIT, Feb. 24 - A number of minor improvements in LaSalle bodies are announced by the Cadillac Motor Car Co. While the company states that the changes are not sufficient to warrant the designation of the cars as new models, these changes do help to improve both internal and external

William G. McCann

SPRINGFIELD, MASS., Feb. 25-William G. McCann, for 17 years with the Indian Motocycle Co., much of the time in the capacity of export manager, died Feb. 23 after a short illness. He was a former president of the New England Export Association.

McAleer Reports Profit
DETROIT, Feb. 24 — McAleer Mfg. Co. reports net profit last year of \$220,214 after charges and taxes, equal to \$4.40 per share on 50,000 shares of no par, common, against \$63,791 the previous year.

Gets Libby-Owens Account

DETROIT, Feb. 24-Grace & Holliday, Detroit advertising agency, has been retained to handle the Libby-Owens-Ford advertising account.

Business in Brief

Written by the Guaranty Trust Co., New York, exclusively for Automotive Industries

NEW YORK, Feb. 25—The mild weather in some sections of the country last week hurt business. The large industries for the most part were quiet, with the exception of textiles. However, some industrial centers reported a moderate increase in employment.

GUARANTY INDEX
The business index of the Guaranty Trust Co. for January stood at 63.8, as against 64.1 for the preceding week and 88.0 a year ago.

CAR LOADINGS
Railway freight loadings for the week ended Feb. 7 totaled 719,053 cars, which marks a slight decrease below those a year ago, a decrease of 166,763 cars below those in the corresponding period last year, and a decrease of 236,928 cars below those in the corresponding period in 1929.

INDUSTRIAL ACTIVITY
Industrial activity during January, based on the consumption o electrical energy by manufacturin plants, was 1 per cent above that in the preceding month.

MERCHANDISE EXPORTS
Merchandise exports during January amounted to \$250,000,000, as against \$410,849,000 a year ago, while imports amounted to \$183,000,000, as against \$310,968,000.

COTTON CONSUMPTION COTTON CONSUMPTION
Cotton consumed during January
amounted to 503,534 bales, including linters, as against 450,196 bales
during December and 638,854 bales
during the corresponding period
last year.

CRUDE OIL OUTPUT
Average daily crude oil production for the week ended Feb. 14 amounted to 2,127,700 barrels, as against 2,116,500 barrels for the preceding week and 2,652,950 barrels for the corresponding week in 1930.

FISHER'S INDEX Professor Fisher's index of wholesale commodity prices for the week ended Feb. 21 stood at 75.8 per cent, as against 76.3 per cent the week before and 76.4 per cent two weeks before.

BANK DEBITS

Bank debits to individual accounts outside of New York City
during the week ended Feb. 18 were
28 per cent below those a year ago.

STOCK MARKET The stock market last week showed pronounced strength and a continuation of the preceding week's rising tendency, although trading was on a smaller scale. Most issues showed net gains for the week, although in some cases they were moderate. New highs for this year were made by 439 stocks.

for this year were made by 439 stocks.

BROKERS' LOANS

Brokers' loans in New York City during the week ended February 18 increased \$23,000,000, making a total increase in the last two weeks of \$56,000,000. The entire expansion in these loans in the last fortnight was accounted for by increases in loans made by reporting member banks for their own account.

RESERVE STATEMENT
The consolidated statement of the Federal Reserve banks for the week ended Feb. 18 showed an increase of \$6,000,000 in holdings of bills bought in the open market, while there were decreases of \$2,000,000 in holdings of discounted bills and of \$10,000,000 in holdings of Government securities. The reserve ratio of Feb. 18 was 84.0 per cent, as against 83.5 per cent a week earlier and 82.9 per cent two weeks earlier.

Men of the Industry and What They Are Doing

Ansley is Promoted

George E. Ansley has been appointed assistant general sales manager of General Motors of Canada, Ltd. Mr. Ansley had his first business experience with the McLaughlin Motor Car Co. He rose from bookkeeper in the Winnipeg, Man., branch to the position of assistant manager, and later managed the Montreal branch of the McLaughlin Motor Car Co. He served as assistant sales manager of the McLaughlin Motor Car Co. at Oshawa headquarters for some time and then became sales head of that division. Since inauguration of the zone system by General Motors, Mr. Ansley has been active in the work of supervising retail outlets.

Brinck Leaves Auburn

H. L. Brinck, sales manager of the Auburn Automobile Co. for the past two years, has resigned.

His plans for the future are not announced except that he will take a vacation. Since 1911 Mr. Brinck has been consistently associated with the motor car industry, serving with Moline, Knight, Midland, Velie, Paige, Mitchell, Stephens, Studebaker, Peerless and Auburn.

Thompson Names Clegg

At a meeting of officials of the Thompson Products, Inc., Cleveland, on Feb. 16, Lee M. Clegg was made vice-president in charge of sales. Mr. Clegg has been with the company for over 12 years and was recently sales manager.

G. V. Sebald was elected at the directors' meeting to succeed him as general sales manager.

White Names Gotshall

A. G. Bean, president of the White Motor Co., Cleveland, has announced the appointment of Nelson S. Gotshall as assistant to the president. Mr. Got-

Plans Handling Exhibit

NEW YORK, Feb. 24—The first industrial exhibit devoted exclusively to the display of mechanical handling equipment will be held at the Grand Central Palace, New York, Nov. 30-Dec. 5. To be known as the First National Exposition of Mechanical Handling, it will be under the management of the International Exposition Co.

C.I.T. Declares

NEW YORK, Feb. 24—Commercial Investment Trust Corp. has declared regular quarterly dividends, payable shall was Eastern sales manager of the Bishop & Babcock Mfg. Co., Cleveland.

Keys Leaves U. S. Rubber

Walter Keys has severed his connection with the United States Rubber Co., with which he has been manager of automotive development in the mechanical rubber division for the past four years. He expects to continue his sales engineering work, and has an office in the Stephenson Building, Detroit.

Pile is Appointed

J. Howard Pile has been appointed editor of Chek-Chart, a compilation of lubrication charts for cars and trucks. He was also at one time technical editor of *Motor World* and other automotive trade publications.

Fokker Returns to U.S.

Anthony H. G. Fokker, airplane designer, builder and consulting engineer of the Aircraft Corp. of America, returned Tuesday on the S. S. Bremen from a trip to Europe during which he visited aeronautical exhibits abroad.

Muncie Elects Harvey

Stockholders of Muncie Gear Co. at the annual meeting Feb. 18 elected H. B. Harvey a director to succeed A. R. Clarke, resigned. Other retiring directors and officers were reelected.

M. E. Forbes Joins Oliver

Myron E. Forbes, former president of Pierce-Arrow Motor Car Co., will become vice-president in charge of finance of the Oliver Farm Equipment Co., it has been announced.

Sundstrand Elects Johnson

A. E. Johnson has been elected a director of Sundstrand Machine Tool Co. to fill a vacancy.

March 5 to holders of record April 1, as follows: Fifty cents on common; \$1.75 on 7 per cent First Preferred and \$1.62½ on 6½ First Preferred; 1/52 of one share of Common Stock per share of Convertible Preference Stock, optional Series of 1929, or cash at the rate of \$1.50 for each share of Convertible Preference Stock.

North American Elects

NEW YORK, Feb. 24—North American Aviation, Inc., has elected Thomas A. Morgan, president of Sperry Gyroscope, Inc., as its president, and C. M. Keys, former president, as chairman of the board.

Alexandre Darracq Dies at Monte Carlo

French Pioneer Built Famous Cars

PARIS, Feb. 13 (by mail)—Alexandre Darracq, founder of the Darracq Automobile Company, died at Monte Carlo this week, age 75. Born at Bordeaux, the son of an engine driver, young Darracq got his engineering training in locomotive shops and later transferred to the French arsenal near Paris. In 1891 he became a director of the Gladiator Company, manufacturing bicycles and tricycles; he headed the Clement - Gladiator - Humber combine, leaving this in 1897 to establish the Darracq Automobile Company, at Suresnes.

He was a strong believer in racing, and his cars took part in speed contests in both Europe and America. He produced an eight-cylinder racing car with which Lee Guinness broke the world's flying kilometer record on the beach at Ostend.

In 1905 Darracq was reorganized as an English Company, Alexandre Darracq remaining in charge until 1912, when he retired. During the war the English Company was reorganized under French fiscal laws and the title changed to Talbot, the name Darracq being retained only for the English market.

Briggs & Stratton Reports Profit

CHICAGO, Feb. 24—The Briggs & Stratton Corp. for the year ended Dec. 31, 1930, reports a net income of \$882,352, after all charges including Federal taxes, equal to \$2.94 a share on the 300,000 shares outstanding. This compares with \$1,499,018, or \$4.99 a share, in 1929.

"Current operations are at a substantially higher level than in the latter part of 1930," Stephen F. Briggs said in his message to stockholders. "Prospects are for better earnings in the first quarter than in the final quarter last year and the outlook for the year is generally good." Current assets at the end of 1930 aggregated \$2,644,723, including \$2,009,147 cash and marketable securities, against current liabilities of \$283,904, according to the report.

Monighan Reports Assets

CHICAGO, Feb. 24—Current assets of the Monighan Mfg. Co. as of Dec. 31, 1930, totaled \$1,126,456, as against current liabilities of \$220,041, representing a moderate improvement in the current position during the year. Cash at the end of 1930 amounted to \$130,075.

The pamphlet report disclosed no change from the preliminary statement of earnings, which showed a net income of \$724,352, equal to \$6.86 a share on the 40,000 shares of Class A stock outstanding.

Canada Sanctions Increased Car Levy

It Will Make Vehicles Imported Cost More

OTTAWA, Feb. 24—With the strong support of Premier Bennett, the Dominion Government last week sanctioned an order in council decreasing the maximum discount allowed on American cars imported into Canada to 20 per cent. The prevailing rate, set by a previous order, had been 30 per cent. The new rate is a compromise between it and the rate of 171/2 per cent asked by Canadian automobile manufacturers and their dealers and virtually amounts to an embargo upon the importation of American cars.

The new order sets the valuation for tariff purposes of cars imported into Canada at a minimum of 80 per cent of the list price at the factory, and means, in effect, a necessary increase in the sales price of these cars on the Dominion market. All makes of American cars which do not maintain factories in Canada will be affected by the immediacy of the order. Premier Bennett indicated, however, that existing contracts of car importers with American factories will be given consideration.

In opposing adoption of the new rate, F. A. Nancekivell, of the Canadian Automobile Importer's Association, and Reo distributor in Montreal, stated that there were in Canada 1148 dealer importers, with 10,000 employees, who would be seriously restricted.

Estimates of the increased cost of American cars to Canadian importers, under the new rate, vary widely, but agree that the increase will be substantial. One estimate places the increased cost of a car listing at \$600 in the United States, at \$60, and esti-mates of the tariff loading on a car listing at \$1,000, vary between \$63 and

Durant Denies Plant Sale

NEW YORK, Feb. 21—A statement was issued from W. C. Durant's office this morning emphatically denying that the Lansing plant has been sold to the Nash Motor Co. It was stated that there was utterly no foundation to this report and, further, that Mr. Durant would not consider any plans for the sale of the plant or properties, or for a merger of any sort.

Kearney Order Chart Rises

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MILWAUKEE, Feb. 23-The Kearney & Trecker Corp., manufacturer of milling machines, reports that its gross orders chart has just taken its first upturn in 18 months. The recession of 1920 showed a downward trend on this chart for 18 months, followed by 18 months of climb, E. J. Kearney, secretary-treasurer, said.

Financial Notes

Budd Wheel Co. has declared regular quarterly dividend of 25 cents on common and \$1.75 on preferred, payable March 31 to holders of record March 10.

Bohn Aluminum & Brass Corp. has declared regular quarterly dividend of 37½ cents, payable April 1 to holders of record March 13.

Hudson Motor Car Co. has reduced its quarterly dividend to 25 cents, payable April 1 to holders of record March 11.

Ross Gear Reports Profit

CHICAGO, Feb. 24-Net profit of the Ross Gear & Tool Co. amounts to \$336,461, after all charges, in the year ended Dec. 31, 1930. This is equal to \$2.24 a share on the 150,000 shares of capital stock and compares with \$565,581, or \$3.77 a share, in 1929. The ratio of current assets to current liabilities was 5.47 to 1 at the close of 1930, as compared with a ratio of 3.46 to 1 at the end of the preceding year. Although business from automobile manufacturers fell off last year, the company reports that boat steering gear business increased 300 per cent and export business gained 30 per cent.

Seek Coated Fabric Standard

WASHINGTON, Feb. 25-A recommended commercial standard for cotton goods for rubber and pyroxylin coating is being circulated among the interested industries by the Department of Commerce. The proposed standard is being sponsored by the Association of Cotton Textile Merchants of New York; the Cotton Textile Institute, Inc.; the Association of Pyroxylin-Coated-Fabric Manufacturers, and the Automobile-Fabric Manufacturers Division of the Rubber Manufacturers Association, Inc. The recommendation is to become effective upon announcement of its official acceptance. Copies of the recommended commercial standard may be obtained on request from the Division of Trade Standards of the Department of Com-

To Exchange Tool Design Data

NEW YORK, Feb. 24-Teachers of machine design in colleges and technical schools have formed a "clearing house," the purpose of which is to exchange problems in machine design, research data, ideas as to methods of teaching machine design, and other information of mutual interest. Material contributed by the members is sent to the chairman, Prof. Frank L. Eidmann, Columbia University, and mimeographed copies are distributed to the members.

Studebaker Sells Branch

SOUTH BEND, Feb. 25-Studebaker's retail store, which has been operated as a direct factory branch at South Bend, Ind., has been sold to the Scherman-Schaus Motor Co., Studebaker distributors in South Bend.

Marmon Agrees To N.A.C.C. Plan

Will Restrict New Model Announcement to Year's End

INDIANAPOLIS, IND., Feb. 25—Announcement has been made by the Marmon Motor Car Co. that henceforth it will not announce new models except in November and December, as suggested by the National Automobile Chamber of Commerce. This plan, G. M. Williams, president, said, is expected to bring about a great degree of stabilization in the motor industry.

"Marmon is confident that such a step eventually will lead to placing the automobile industry on a sounder and more substantial basis," Mr. Williams said. "Not only will the simultaneous introduction of new models by all companies lead to a more uniform and more stable business to the manufacturer, but it will place the dealer on a firmer footing and be of real benefit to the motorist.

"It seems only a question of time but that the uniform new car announcement will be made by all companies and when this becomes a fact it is certain that manufacturers, dealers and owners will find themselves in a much more advantageous posi-

Breaks Midget Record

PARIS, Feb. 17 (by mail)-A speed of more than 100 miles an hour was attained for the first time by an automobile equipped with an engine of 45 cubic inches, when an English M.G. Midget, driven by G. E. T. Eyston, on Montlhery track, near Paris, secured 5 international class records for distances of 5 kilometers, 5 miles, 10 kilometers and 10 miles.

The official times are as follows: 5 kilometers in 1 min. 48 4/5 sec.; 5 miles in 2 min. 55 17/100 sec.; 10 kilometers in 3 min. 38 38/100 sec.; and 10 miles in 5 min. 53 40/100 sec. The average for 10 miles is 102 miles

Minnesota Trades Elect Swanson

MINNEAPOLIS, MINN., Feb. 24-B. F. Swanson of Anoka has been elected president of the Minnesota Motor Trades Association at the Eleventh Annual Convention. H. E. Warren, St. Paul, is vice-president; L. M. Rocheford, Northern Finance Corp., Minneapolis, treasurer, and Arnon N. Benson of Minneapolis is reelected executive secretary, an office he has held seven years.

Incorporates New Company

CHICAGO, Feb. 24 - Automobile Warning Signal Co. has been granted incorporation papers to manufacture warning signals, sirens, etc. Nathan Gerwetz, L. P. Givertz and Charles P. Schwartz are the incorporators, and headquarters is at 1 North LaSalle Street.

January Output Set At 171,903 Units

U. S. Figure Gains Over That of December

WASHINGTON, Feb. 26-Production of motor vehicles in the United States in January of the current year rose to 171,903 units from 155,706 last December, according to the Bureau of the Census.

Canadian production increased to 6496 from 5622. The United States January production consisted of 139,-814 passenger cars, increased from 122,748; 31,577 motor trucks, increased from 31,533, and 512 taxicabs, decreased from 1425.

The Canadian production in January was made up of 4552 passenger cars, increased from 4225, and 1944 trucks, increased from 1397.

Publishes Sales Bulletin

WASHINGTON, Feb. 25—"Selling Automobiles in the Noncontiguous Territories of the United States," a pamphlet covering sales conditions and practices in Alaska, Porto Rico, Hawaii, and the Philippine Islands, has just been published by the Bureau of Foreign and Domestic Commerce. The Automotive Division calls attention to the fact that the Bulletin is No. 741 in the Trade Information Series and that it may be obtained from the Superintendent of Docu-ments, Washington, for 10 cents.

Waukesha Schedules Up

WAUKESHA, WIS., Feb. 23-Production at the Waukesha Motor Co. has been stepped up rather briskly under the stimulus of releases and new orders, one of which calls for delivery of 6000 engines to a leading tractor and implement manufacturer. Harry L. Horning, president and chief engineer, who has just returned from a European trip, announces that eight new gasoline engine designs are now ready for the market and three additional lines of Diesel engines will be introduced during this year.

Franklin Increases Schedule

SYRACUSE, Feb. 25-An increase of 15 per cent in production schedules has been announced by President H. H. Franklin of the Franklin Automobile Co. for February, March and April. This increased output has been made necessary to take care of retail orders, it was said.

Glancy Releases Jump

WAUKESHA, WIS., Feb. 23-Glancy Malleable Corp. has found it necessary to start an additional furnace and add 30 to 40 former employees to the payroll because of increasing releases from customers in the automotive and implement industry.

+ + CALENDAR + + OF COMING EVENTS

Quebec, AutomobileFeb. 21-28
Memphis, AutomobileFeb. 23-28
Des Moines, AutomobileFeb. 23-28
Seattle, Wash., Automobile, Feb. 24-Mar. 1
Camden, N. J., Automobile, Feb. 25-March 2
Geneva, AutomobileMarch 6-15
Los Angeles (Transportation). March 15-28
Altoona, Pa., AutomobileApril 15-27
International Garage Exposition, Ber-

CONVENTIONS

American Chemical Society, Indian- apolis, IndMarch 30-April 4
Aeronautical Chamber of Commerce, Detroit
U. S. Chamber of Commerce, Atlantic CityApril 28-May 1
International Chamber of Commerce, Washington, D. CMay 4-9
National Foreign Trade Council, New York
Fourth National Oil and Gas Power Meeting, A.S.M.E., Madison, Wis., June 15-18

SALONS

San Francisco, Calif., Palace Hotel, Feb. 21-28

Organizes Consulting Service

MILWAUKEE, Feb. 23—A group of former junior executives of the Federal tire division of the Fisk Rubber Co., at Cudahy, suburb of Milwaukee, has organized Production Service, Inc., with headquarters at 704 East Pleasant Street, Milwaukee, to engage in the field of management engineering. Oscar F. Loeffler, for 18 years in production control work, is president of the new organization. George J. Mead is vice-president; Fred M. Sawin is treasurer, and William M. Diedrich is secretary.

Siebert Asks Receiver

TOLEDO, Feb. 24 - The shop of Siebert, Inc., founded nearly 100 years ago as a wagon and carriage shop and in recent years a builder of special motor car bodies, filed a voluntary petition in bankruptcy here today with \$114,520 liabilities and \$16,251 assets. It has two plants here.

National Adds to L. A. Plant

LOS ANGELES, Feb. 24 - National Standard Co., Niles, Mich., manufacturers of bead wire for tire casings, have just added 10,000 sq. ft. of floor space costing \$25,000 to their Los Angeles plant.

Asks Uniform Aero Laws

CHICAGO, Feb. 24 - Uniform state laws for aeronautical control are asked in a bill introduced in the Illinois Assembly.

January Equipment **Business Improves**

Shows Increase Over December, M.E.A. Index Shows

NEW YORK, Feb. 23-January business in parts and equipment showed an increase over December, although still falling somewhat behind January of a year ago, according to index figures prepared by the Motor and Equipment Association. Original equipment index for January was 84, as compared with 64 in December and with 135 in January, 1930, indicating a probably higher production schedule for February than was maintained during January.

during January.

Service parts and accessories fell somewhat behind January, being 98 and 46 respectively, as compared with 190 and 55 for December and with 137 and 79 for January of last year.

Service equipment showed a marked increase over December with an index of 92 as compared with 75 for December and with 135 in January a year ago.

The resulting grand index was 84 as compared with 69 in December and with 132 in January of last year.

Wholesalers did a smaller volume of business in January than they did in December a year ago, with an index of 83 as compared with 111 in December and with 106 in January, 1930.

Accounts receivable on wholesalers' books were also reduced during the month.

Paris to Have Truck Show

PARIS, Feb. 15 (by mail)-In addition to the passenger car Salon to be held in the Grand Palais from Oct. 1 to 11 inclusive, the French automobile industry will stage a truck show in the same hall from Nov. 28 to Dec. 6. Stationary engines, heavy tools and garage and workshop equipment will be included in with the trucks and buses. Applications for space close March 31. The rules for the 1931 Paris show still discriminate against American manufacturers.

Has Taxi Advertising Device

NEW YORK, Feb. 24-The Adometer Corp. of America has developed an automatic advertising device for installation in taxicabs. This device shows miniature posters in rotation, 20 of these posters being shown in three minutes or eight seconds for each poster. This device will be installed in the Parmelee company's entire fleet of cabs and will also be made available for other cabs.

Whitman Reports Loss

DETROIT, Feb. 24 - Whitman & Barnes, Inc., reports net loss for year ended Dec. 30, 1930, amounting to \$184,271 after all charges and taxes, as compared with net profit of \$195,-419, or \$2.32 a share, on 84,083 shares in 1929.

Oakite Reduces Prices

NEW YORK, Feb. 24-Oakite Products, Inc., has announced a reduction in price for its various types of service, effective Feb. 16.